

**California Regional Water Quality Control Board
Santa Ana Region**

January 31, 2014

ITEM: XX

**SUBJECT: Basin Plan Amendment to Incorporate Revisions to the Salt Management
Plan for the Santa Ana Region, Resolution No. R8-2014-0005**

EXECUTIVE SUMMARY

Federal law requires states to establish water quality standards (beneficial uses, water quality criteria, and an antidegradation policy) for all water bodies within the state's jurisdiction, and to review those standards at least once every three years. The Porter - Cologne Water Quality Control Act (Division 7, "Water Quality", of the California Water Code) establishes similar requirements in state law. For the Santa Ana Region, these standards were established in the 1975, 1984 and 1995 Water Quality Control Plans, Santa Ana River Basin (Basin Plans).

On January 22, 2004, Santa Ana Regional Water Quality Control Board adopted Resolution R8-2004-0001 to amend the Basin Plan for the Santa Ana River Basin. The amendment included revised groundwater subbasin boundaries (also known as groundwater management zones), revised total dissolved solids (TDS) and nitrate-nitrogen objectives, revised TDS and nitrogen wasteload allocations for discharge of recycled water to the Santa Ana River and its tributaries, and revised reach designations for certain waterbodies. To accommodate reclamation projects in the Region, alternative, less stringent water quality objectives, so-called "Maximum Benefit" objectives, were established for some groundwater management zones, including the San Timoteo and Beaumont Management Zones. The application of these objectives is contingent on the implementation of specific commitments to implement basin-wide water supply and water quality management programs, including salt removal projects, monitoring programs and conjunctive use programs – all developed to ensure that the beneficial uses of the groundwater management zone are protected. The Basin Plan amendment also specified an implementation plan known as the Salt Management Plan for Santa Ana Region. The State Water Resources Control Board (State Water Board) and Office of Administrative Law (OAL) approved the Amendment on September 30, 2004 and December 23, 2004, respectively. The surface water standards provisions of the Amendment were approved by the U.S. Environmental Protection Agency on January 20, 2007.

The Salt Management Plan contains a watershed-wide monitoring program to determine compliance with water quality objectives, as specified in Section 13242 of the California Water Code. The Regional Board relies on data from the surface and groundwater monitoring program to assess whether applicable water quality standards are being attained, to determine if any assimilative capacity exists in each groundwater management zone, and to revise the wasteload allocation as necessary to protect designated beneficial uses. Water and wastewater agencies throughout the Region in the Santa Ana River Basin formed a Basin Monitoring Program Task Force (BMP Task Force) to provide the water quality data specified in the Salt Management Plan and have submitted regular and timely reports to the Regional Board.

Review of new water quality monitoring data indicates that the current ambient concentration of TDS and/or nitrate-nitrogen has changed in several groundwater management zones and, as a result, the available assimilative capacity has also changed. New information has become available that warrants revisions to the boundary for the Beaumont groundwater management zone, and changes to the "maximum benefit" programs for both the Beaumont and San Timoteo Management Zones are necessary. Changes in statewide policy relevant to nitrogen management in groundwater and the protection of groundwater management zone beneficial uses have also occurred and should be reflected in the Basin Plan.

Federal and state law require the Regional Board to review and update the Basin Plan periodically, including implementation requirements, to take into consideration the best available data and any new scientific information. The above-referenced changes necessitate a

Basin Plan Amendment. This staff report describes the technical basis for the proposed Basin Plan Amendment. It covers the following topics:

1. Update of the Basin Plan Onsite Wastewater Treatment Systems provisions in the Basin Plan, including incorporation of the Statewide Onsite Wastewater Treatment Systems Policy into the Basin Plan (Chapter 2) and update of the Minimum Lot Size Criteria (Chapter 5);
2. Revise Figure 3-3. Management Zone Boundary – San Bernardino Valley and Yucaipa/Beaumont Plains (Chapter 3) to show both the legal boundary of the Beaumont groundwater Management Zone and the hydrogeological boundary (the entire Beaumont hydrogeologic Storage Unit as defined by the USGS) (Chapter 3);
3. Update the ambient TDS and nitrate-nitrogen concentrations and the assimilative capacity for each groundwater Management Zone (Chapter 5);
4. Update the N loss coefficient for the San Jacinto area groundwater management zones (Chapter 5);
5. Deletion of the TDS and total inorganic nitrogen wasteload allocation for Yucaipa Valley Water District and the City of Beaumont (Chapter 5)
6. Update the Wastewater Reclamation section (Chapter 5);
7. Update the Yucaipa, San Timoteo and Beaumont Management Zone Maximum Benefit Programs (Chapter 5)

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1.0 Introduction

Federal law and implementing regulations¹ require states to establish water quality standards for all water bodies within the state's jurisdiction. A water quality standard is composed of three parts: 1) the beneficial uses that apply to the waterbody; 2) the water quality criteria (or "objectives", in California terminology) needed to protect those uses; and 3) an antidegradation policy to protect water quality. The Porter-Cologne Water Quality Control Act (Division 7, "Water Quality", of the California Water Code, the "Porter- Cologne Act") establishes similar requirements in state law.

In California, Regional Water Quality Control Boards enact water quality standards through a formal basin planning process. Each Regional Board publishes a Water Quality Control Plan, or Basin Plan, that identifies individual water bodies within its jurisdiction, designates the beneficial uses that apply to each waterbody and specifies the water quality objectives for those water bodies. Although the federal Clean Water Act applies only to surface waters, the Porter-Cologne Act applies to both the ground and surface waters of California.

1.1 Basin Plan - Chapter 2 Plans and Policies

In addition to the Santa Ana Region Basin Plan, a number of water quality control plans and policies adopted by the State Water Resources Control Board (State Water Board) direct the Regional Board's actions. Chapter 2 of the Basin Plan contains a description of these statewide Plans and Policies that are applicable in the region and that are incorporated by reference. The 1994 update of the Basin Plan was the last time that these Plans and Policies descriptions were updated. Since 1994, additional Plans and Policies have been adopted and/or revised by the State Water Board.

1.2 Salt Management in the Santa Ana Region

Historically, as discussed in the 1975, 1983 and 1994 Basin Plans for the Santa Ana Region, the most serious problem in the Santa Ana basin was the buildup of dissolved minerals, or salts, in the ground and surface waters. Sampling and computer modeling of groundwaters showed that the levels of dissolved minerals, generally expressed as total dissolved solids (TDS) or total filterable residue (TFR), were exceeding water quality objectives, or would do so in the future, unless appropriate controls were implemented. Nitrogen levels in the Santa Ana River, largely in the form of nitrate, were likewise projected to exceed water quality objectives. High levels of TDS and nitrate adversely affect the beneficial uses of ground and surface waters. The mineralization of the Region's waters, and its impact on beneficial uses, remains a significant problem.

Each use of water adds an increment of dissolved minerals. Significant increments of salts are added by municipal and industrial use, and the reuse and recycling of wastewater as it moves from the hydrologically higher areas of the Region to the ocean. Wastewater and recycled water percolated into groundwater management zones are typically pumped and reused a number of times before reaching the ocean, resulting in increased salt concentrations. The concentration of dissolved minerals can also be increased by evaporation or evapotranspiration. One of the principal causes of the mineralization problem in the Region is historic irrigated agriculture, particularly citrus, which, in the past, required large applications of water to land,

¹ 40 Code of Federal Regulations (CFR) 131 Water Quality Standards Regulation

causing large losses by evaporation and evapotranspiration. TDS and nitrate concentrations are increased both by this reduction in the total volume of return water and by the direct application of these salts in fertilizers. Dairy operations, which began in the Region in the 1950's and continue today, also contribute significant amounts of salts to the basin.

In the mid-1990s, a Santa Ana Region-wide effort was initiated to perform certain investigations on the groundwater basin boundaries and the TDS and nitrate-nitrogen water quality objectives for the groundwater subbasins in the Santa Ana River Watershed. A TIN/TDS Task Force was formed to conduct the necessary studies that led to the establishment of revised groundwater subbasin boundaries and TDS and nitrate-nitrogen objectives for the revised groundwater subbasins (now termed "management zones"). Water Board staff, water supply, water-recycling and wastewater agencies, as well as other agencies including the US Geological Survey, participated in the Task Force. This effort resulted in significant changes to the salt management plan in the Basin Plan in 2004 (Resolution No. R8-2004-0001).

Based on the technical investigations and recommendations from the TIN/TDS Task Force, the Basin Plan for the Santa Ana Region was revised in 2004 (Resolution No. R8-2004-0001) to establish new groundwater management zones and TDS and nitrate-nitrogen water quality objectives to protect designated beneficial uses in the management zones. The revised objectives were based on a statistical analysis of well water quality data for the period of 1954 to 1973, with the resulting well statistics volumetrically averaged to yield a new statistic for each groundwater management zone (defined as the "historical ambient" water quality). This approach was consistent with the State's antidegradation policy, State Water Board Resolution No. 68-16. Because these objectives represent historical ambient quality consistent with the antidegradation policy, they are termed "antidegradation" objectives.

In addition to the antidegradation objectives established in the 2004 Basin Plan Amendment, an alternative set of "maximum benefit" TDS and nitrate-nitrogen objectives was established for specific groundwater management zones. These "maximum benefit objectives", which are less stringent than the applicable antidegradation objectives, were developed and approved to accommodate water resource management plans formulated by specific agencies and parties. These plans incorporated, in part, the expanded use and recharge of recycled water. Adoption of these less stringent objectives required the demonstration of conformance with the antidegradation policy, *i.e.*, that the beneficial uses of the affected waters would continue to be protected, that waste discharges would be required to achieve best practicable treatment or control, and that water quality consistent with maximum benefit to the people of the state would be maintained. The proponents of the "maximum benefit" objectives made these demonstrations. The "maximum benefit" demonstrations were based on commitments by the proponents of the objectives to implement specific programs and projects, which were then incorporated in the Basin Plan as well. The Basin Plan specifies that if these programs and projects are not implemented to the Regional Board's satisfaction, then the alternative "antidegradation" objectives apply to the affected waters for regulatory purposes. Further, in this situation, the Basin Plan requires mitigation for discharges in excess of those allowed pursuant to the antidegradation objectives.

The 2004 Basin Plan Amendment also included updated wasteload allocations for regulating discharges of TDS and total inorganic nitrogen (TIN) to the Santa Ana River and its tributaries, and thence to groundwater management zones recharged by these surface waters. The Santa Ana River and tributaries are a significant source of recharge to underlying groundwater management zones in the Upper Santa Ana River Basin and, below Prado Dam, to the Orange

County groundwater basin. The quality of the river and its tributaries thus has a significant effect on the quality of the Region's groundwater, which is used by more than 5 million people. Control of surface water quality is appropriately one of the Regional Board's highest priorities. The wasteload allocations distribute a share of the total TDS and TIN wasteloads to each of the discharges to the river or its tributaries. The allocations are implemented principally through TDS and nitrogen limits in waste discharge requirements issued to municipal wastewater treatment facilities (Publicly Owned Treatment Works or POTWs) that discharge to the Santa Ana River, either directly or indirectly.²

Lastly, the 2004 Basin Plan Amendment contained provisions that required dischargers to develop and implement long-term groundwater and surface water monitoring and reporting programs. The purpose of these programs is to collect real-time data to assess the status and trends of nitrogen and TDS concentrations throughout the watershed. These data serve as a basis for review and/or update of the Salt Management Plan. Annual reporting of the surface water quality data and triennial reporting of ambient groundwater quality are required.

Basin Monitoring Program Task Force (BMPTF)

To implement requirements specified in the 2004 Salt Management Plan, in 2005 local stakeholders formed the Basin Monitoring Program Task Force (BMPTF), administered by the Santa Ana Watershed Project Authority (SAWPA). Like its predecessor, the TIN/TDS Task Force, the BMPTF is comprised of approximately 22 water supply and wastewater agencies in the region. Working closely with Water Board staff, the BMPTF has utilized consultants to recalculate the ambient concentration of TDS and nitrate-nitrogen in each groundwater management zone and also to perform the update to the TDS and nitrogen wasteload allocations. The BMPTF has also been instrumental in reviewing provisions of the existing Salt Management Plan to ensure that the Basin Plan reflects current knowledge and science. These BMPTF studies and recommendations are the principal basis for the proposed amendments to the Salt Management Plan.

1.3 Proposed Amendments to the Basin Plan

The proposed amendments to the Basin Plan are shown in the Attachment to Resolution No. R8-2014-0005 and include the following:

- Update of the Plans and Policy Chapter of the Basin Plan to incorporate the Onsite Wastewater Treatment Policy (OWTS)³;
- Update of the map delineating the Beaumont Management Zone Basin Boundary, and the addition of explanatory narrative;
- Update of groundwater management zone ambient water quality and assimilative capacity findings and incorporation of language pertaining to future updates of these findings;

² Work to update these wasteload allocations is being conducted and a separate Basin Plan amendment will be prepared.

³ While the OWTS Policy was not specifically part of the BMPTF efforts related to the revisions of the Salt Management Plan, it is being incorporated into this Basin Plan amendment (see Section 2.0).

- Update of the Yucaipa, San Timoteo and Beaumont Management Zone Maximum Benefit Programs.

2.0 On-site Wastewater Treatment Systems

As part of the 1994 updates of the Basin Plan, all of the applicable statewide Plans and Policies were incorporated by reference into the Basin Plan. Since that time, a number of Plans and Policies, including, but not limited to, the Recycled Water Policy, the Water Quality Enforcement Policy, the Low Threat Underground Storage Tank Closure Policy, and the On-site Wastewater Treatment System Policy (OWTS), have been adopted by the State Water Board. While new statewide plans and policies are typically incorporated in Regional Board basin plans by reference, with brief explanatory paragraphs, the Regional Boards are explicitly required to incorporate the requirements established in the OWTS Policy in their respective Basin Plans. The Regional Boards may consider whether to retain or adopt any more protective OWTS standards.

2.1 Incorporation of the On-site Wastewater Treatment Systems Statewide Policy into the Basin Plan

On June 19, 2012, the State Water Board approved a water quality control policy for siting, design, operation, and maintenance of onsite wastewater treatment systems (OWTS policy). This Policy authorizes only subsurface disposal of domestic strength, and in limited instances high strength, wastewater and establishes minimum requirements for the permitting, monitoring, and operation of OWTS for protecting beneficial uses of waters. OWTS systems are referred to as on-site septic tank-subsurface disposal systems in the Santa Ana Region Basin Plan (see Chapter 5). The OWTS Policy conditionally waives the requirements for owners of OWTS to apply for and receive Waste Discharge Requirements in order to operate their systems, provided that they meet the conditions established in the Policy. The OWTS Policy does not supersede or require modification of Total Maximum Daily Loads or Basin Plan prohibitions of discharges from OWTS.

It is the intent of the OWTS Policy to utilize efficiently and improve upon where necessary existing local programs through coordination between the State and local agencies. To accomplish this purpose, the Policy establishes a statewide, risk-based, tier approach for the regulation and management of OWTS installations and replacements and sets the level of performance and protection expected from OWTS.

Tiers

The new OWTS Policy implements levels (tiers) of requirements based upon the potential threat to water quality that may be caused by the onsite system. The tiers are as follows:

Tier 0 - Existing OWTS: provides a conditional waiver of waste discharge requirements for existing, properly functioning systems that are not failing or in need of corrective action (Tier 4) and are not determined to be contributing to an impairment of surface water (Tier 3). Tier 0 conditions for existing OWTS are specified in section 6 of the OWTS Policy.

Tier 1- Low-Risk New or Replacement OWTS: provides a conditional waiver of waste discharge requirements for new or replacement systems that comply with specific low risk

siting and design criteria intended to be protective of water quality and where there is not an approved Local Agency Management Program (LAMP) (see Tier 2, below). The criteria are intentionally conservative to ensure that use of such systems, without specific monitoring, will not result in water quality impairment. Tier 1 criteria for low-risk OWTS are specified in sections 7 and 8 of the OWTS Policy.

Tier 2 – Local Agency Management Program (LAMP) for New or Replacement

OWTS: To address the broad range of geological and climatic conditions in California that may affect OWTS siting, design and operation, local agencies may submit management programs for approval by the appropriate Regional Board (see below) and upon approval, then manage the installation of new and replacement OWTS under that LAMP. Once the LAMP is approved, new and replacement OWTS that are included within the LAMP may be approved by the local agency. LAMPs approved under Tier 2 provide an alternate method from Tier 1 programs to achieve the same water quality and public health protection goals. At its discretion, the local agency may include Tier 1 standards within its Tier 2 LAMP. Tier 2 requirements for LAMPs are described in section 9 of the OWTS Policy.

Tier 3 – Impaired Areas: provides special conditions for existing, new and replacement OWTS located near impaired waters listed in Attachment 2 of the OWTS Policy. These OWTS may be addressed by a TMDL and its implementation program, or by special provisions contained in a LAMP. If there is no TMDL or special provisions, new or replacement systems within 600 feet of the impaired waters listed in Attachment 2 to the Policy must meet advanced protection requirements specified in the Policy. The Tier 3 advanced treatment requirements are in section 10 of the OWTS Policy.

Tier 4 – OWTS Requiring Corrective Action specifies corrective actions for failing onsite systems. After completion of corrective action and repair, the onsite system would then return to Tier 1, Tier 2, or Tier 3 (whichever is appropriate in the specific circumstances). Tier 4 criteria for OWTS requiring corrective action are specified in section 11 of the OWTS Policy.

Local Agency Management Plans

A key component of the OWTS Policy is onsite management programs developed and implemented by local agencies. The Policy recognizes that responsible local agencies can provide the most effective means to manage OWTS on a routine basis. The OWTS Policy specifies that the Santa Ana Region will review and, if appropriate, approve new Local Agency Management Plans (LAMPS) for new and replacement OWTS in all of Orange County. The Colorado Desert and the Lahontan Regional Water Quality Control Boards will review and approve LAMPs for the area of the Santa Ana Region located in Riverside and San Bernardino Counties, respectively.

The OWTS Policy is available at the following link:

http://www.waterboards.ca.gov/water_issues/programs/owts/docs/owts_policy.pdf

2.2 Proposed Modifications to the Basin Plan Minimum Lot Size Criteria for New/Replacement OWTS

In addition to incorporation of the OWTS Policy, changes to Chapter 5 (Implementation Plan) “Minimum Lot Size Requirements and Exemption Criteria for New Developments

Using On-site Septic Tank-Subsurface Leaching/Percolations Systems”, are also proposed. Studies conducted during the 1980’s indicated that high density developments utilizing septic tanks for wastewater disposal were adversely affecting the quality of underlying groundwaters within the Santa Ana Region. In response, on October 13, 1989, the Regional Board amended the Basin Plan to add a regionwide one-half acre minimum lot size requirement for new developments using on-site septic tank-subsurface disposal systems. Criteria pertaining to replacement systems were also specified, together with criteria for exemptions from the minimum lot size requirements. The Regional Board continues to restrict new developments proposing to use septic tanks to an average of one single-family residence per half-acre.

As discussed above, to address new and replacement systems, the OWTS Policy relies primarily on local agencies (e.g., counties, cities and independent districts) to develop and implement local agency management programs (LAMPs), approved by the Regional Boards. The Policy provides the local agencies three years to develop their LAMP and submit it to the Regional Board for approval. If a LAMP has not been approved and implemented within five years of the effective date of the Policy (May 13, 2018), the very restrictive Tier 1 criteria will apply for new or replacement OWTS. In the interim, except for proposed systems located near impaired waterbodies, local agencies are permitted to continue to implement their current OWTS permitting programs, provided they are in conformance with the Basin Plan.

Board staff regularly coordinates with local agencies to address the permitting of OWTS. Riverside and San Bernardino Counties have incorporated the Regional Board’s minimum lot size requirements into their respective guidelines for the proposed use of OWTS (see Section 2.1). Large scale projects (e.g., 30 dwellings or more, discharges of 5,000-gallons per day, etc.) are referred to Regional Board staff for approval. Project proponents are required to submit copies of County approved soils percolation report(s), site plan(s) and CEQA documentation for Board staff review. All projects proposing the use of septic systems that do not meet the Minimum Lot Size Criteria (e.g., small lots, high groundwater, soil conditions, etc.) are also referred to the Regional Board for review/consideration. The Counties also have the discretion of referring any project they believe may not be protective of water quality and/or public health to the Regional Board for review.

Although the criteria for new or replacement OWTS located near impaired surface waterbodies are effective immediately, the Policy’s criteria for new/replacement systems elsewhere do not become effective until a LAMP is approved, or May 13, 2018, whichever occurs first. Therefore, it is necessary for the Regional Board to continue to implement its minimum lot size criteria until the Policy’s criteria become effective.

It is assumed that any approved LAMP will contain criteria at least as protective as the minimum lot size criteria in the Basin Plan and the Tier 1 criteria in the OWTS Policy. As noted above, Tier 1 criteria will become effective on May 13, 2018, for all areas not addressed by an approved LAMP. Those criteria would apply a 2.5 acre minimum lot size requirement for the majority of this Region. Under either of these scenarios, the Basin Plan one half –acre minimum lot size criteria will be superseded.

Therefore, this proposed Basin Plan amendment to incorporate the OWTS Policy into the Basin Plan will also sunset the *Minimum Lot Size Requirements and Exemption Criteria for New Developments Using On-Site Septic Tank-Subsurface Leaching/Percolation Systems*

specified in the Basin Plan for areas covered under an approved LAMP, or May 13, 2018, whichever occurs first.

2.3 Inclusion of Web-link to the State Water Board' Plans and Policies Page

Given that the State Water Board periodically adopts new or amends existing statewide Plans and Policies, Regional Water Board staff recommends adding to the Basin Plan a link to the State Water Board's Plans and Policies web-page for reference.

The recommended addition of a brief description of the On-site Wastewater Treatment System Policy to the Basin Plan is shown in the Attachment to Resolution No. R8-2014-0005, Chapter 2.

The proposed addition of a link to the State Water Board's Plans and Policies web-page is shown in the Attachment to Resolution No. R8-2014-0005, Chapter 2.

Proposed changes to the Minimum Lot Size Criteria are shown in the Attachment to Resolution No. R8-2014-0005, Chapter 5, Implementation.

3.0 Proposed Changes Related to the Beaumont Groundwater Management Zone Boundary

As discussed in Section 1, as part of the 2004 amendments to the Basin Plan, all groundwater Management Zone boundaries were reviewed. As described in the Basin Plan, groundwater management zones are intended to be distinct groundwater units from a groundwater flow and water quality perspective. In general, the established groundwater management zone boundaries are consistent with groundwater flow regimes and include well-defined areas of recharge and discharge. However, in the case of the Beaumont Management Zone (see Figure 1), the eastern-most boundary was defined by the jurisdictional boundary, established in the California Water Code, between the Santa Ana Regional Water Board (Santa Ana Water Board) and the Colorado River Regional Water Board (Colorado Water Board). This legal boundary separates the two regions based on topography and surface water drainage. However, with respect to groundwater flow and quality, hydrogeological and water quality data indicate that the Beaumont groundwater management zone actually extends to the east of the current legal boundary, into the jurisdictional domain of the Colorado Water Board. As a result, the Beaumont groundwater basin is not being regulated as a single hydrologic unit⁴.

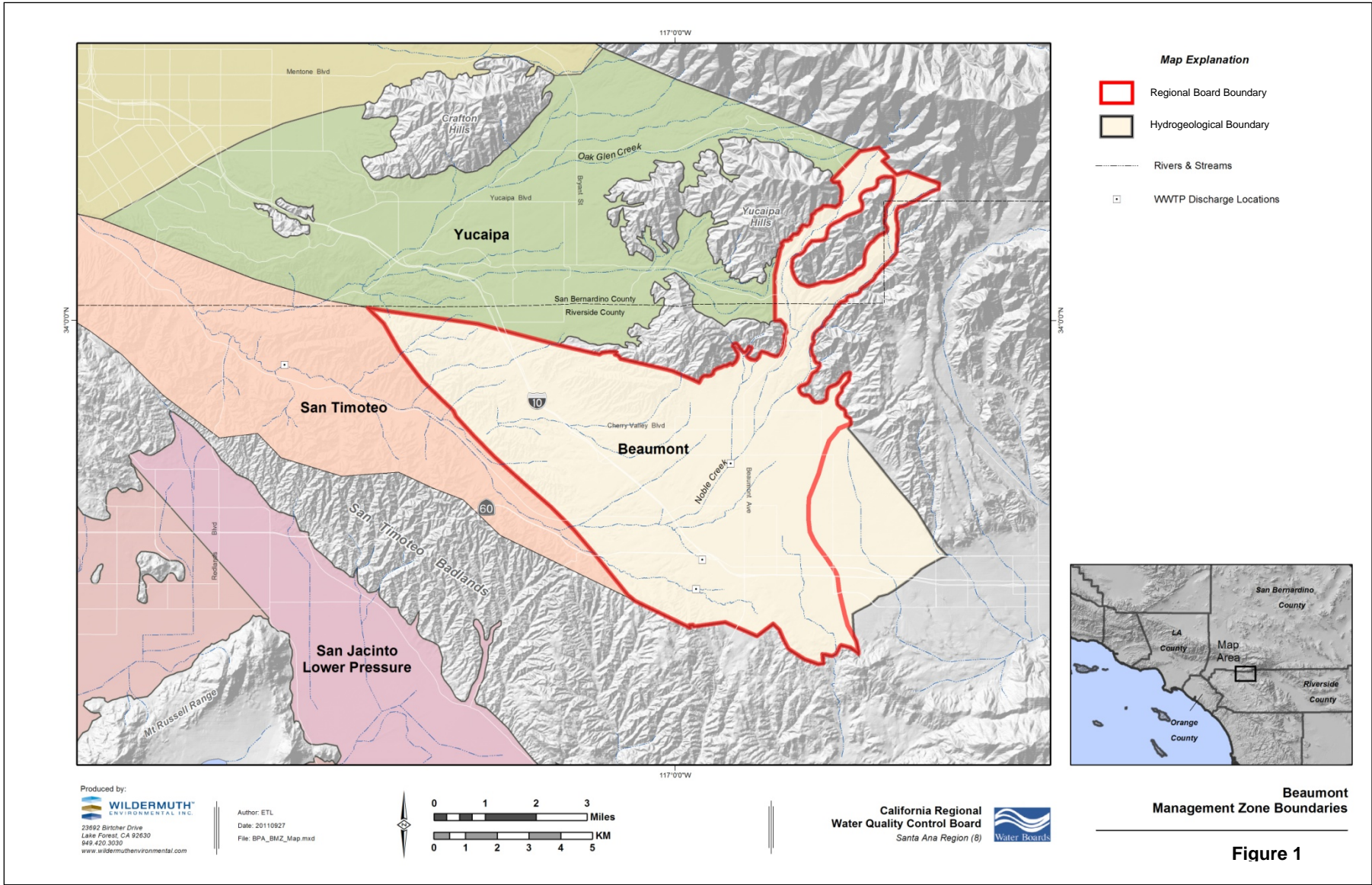
Staff recommends that Figure 3-3 in the Basin Plan (Management Zone Boundaries – San Bernardino Valley and Yucaipa/Beaumont Plains) be amended to show both the boundary of the Santa Ana Region overlying the Beaumont Management Zone, as now delineated in the Basin Plan, and the boundary of this zone from a hydrogeological perspective, consistent with the methodology used to define other groundwater management zone boundaries in the Santa

⁴ The term "groundwater management zone" is employed solely in the Basin Plan for the Santa Ana Region. The Basin Plan for the Colorado River Region uses the term "hydrologic unit".

Ana Region. These management zone boundaries are shown in Figure 1. A narrative discussion would also be added to the Basin Plan to explain the boundary differences and their significance from a regulatory perspective. The narrative would include a brief explanation of the coordinated regulatory approach that would be used by the Santa Ana and Colorado Water Boards to assure that waste discharges, the use of recycled water, recharge projects and the like would be considered in the context of potential impacts to the Beaumont Management Zone as a whole. This approach would facilitate the protection of water quality and beneficial uses in the management zone, as well as the efficient and effective management of water/wastewater resources. The proposed narrative is shown in the Attachment to the Resolution 2014-0005, Chapter 3 – Beneficial Uses.

A revised map (Figure 3-3) delineating both the legal and hydrogeological boundaries of the Beaumont Management Zone and the narrative proposed to be added to the Basin Plan are included in the draft Basin Plan amendment (Attachment to Resolution No. R8-2014-0005, Chapter 3, Beneficial Uses).

Figure 1. Beaumont Management Zone – Proposed Revised Map Delineating Legal and Hydrogeological Boundaries



4.0 Assimilative Capacity Findings

Some groundwater management zones in the Region have assimilative capacity for TDS and/or nitrogen; that is, current quality is better than established water quality objectives. The amount of assimilative capacity varies widely, depending on the individual characteristics of the groundwater management zone in question. As specified in the Basin Plan, current ambient quality for all management zones must be determined every three years (Chapter 5 – Implementation, V.B.1). This enables the Regional Board and dischargers to determine: 1) whether water quality objectives are being met; 2) whether findings of assimilative capacity need to be revised; and, 3) whether some change in the nitrogen and/or TDS management strategy is necessary to protect and/or improve water quality.

Working closely with stakeholders throughout the Region, the Regional Board adopted a standard method for calculating the average ambient concentration of nitrate-nitrogen and TDS in each groundwater management zone. The methods are described in Basin Plan amendment attached to Regional Board Resolution No. R8-2004-0001, the related staff report and technical appendices, including the Phase 2A Final Technical Memorandum for the TIN/TDS Study prepared by Wildermuth Environmental, Inc., July 2000. A brief description of the mathematical procedures applied in the standard methods, including the specific algebraic equations used, is also available in the report entitled: "Final Technical Memorandum – Recomputation of Ambient Water Quality in the Santa Ana Watershed for the Period 1990 to 2009" prepared on behalf of the BMPTF by Wildermuth Environmental, Inc. (WEI, 2011). It is important to note that no substantive computational changes have been made to the assimilative capacity calculation procedure since the methods were approved for use by the Regional Board in 2004. In all cases, the current ambient concentration of nitrate-nitrogen and TDS is calculated as a volume-weighted average. All available groundwater data for the most recent 20-year monitoring period are used to ensure that the computed ambient water quality concentrations account for both temporal and spatial variability, as recommended in state guidance concerning the implementation of the state's antidegradation policy.⁵

Since adoption of the 2004 Basin Plan amendment, assimilative capacity findings have been updated four times (on a three-year schedule). The first re-assessment covered the 20-year period from 1978 to 1997 (WEI, 2000); the second update covered the period from 1984 to 2003 (WEI, 2005); the third update covered the period from 1987 to 2006 (WEI, 2008); and the most recent update covers the period from 1990 to 2009 (WEI, 2011). Currently, the BMPTF is in the process of completing the ambient water quality determination for the period 1993-2013; this is expected to be completed by June 2014.

To determine whether TDS and nitrate-nitrogen assimilative capacity exists in each management zone, the TDS and nitrate-nitrogen ambient water quality concentrations were generally compared to the antidegradation objectives, which were based on historical water quality. (Where "maximum benefit" objectives have been established and apply (i.e., where the 'maximum benefit' programs are being implemented to the Regional Board's satisfaction), current ambient quality is compared to those objectives.) If the current ambient water quality of a management zone is the same as or poorer than the applicable objectives, then that management zone does not have assimilative capacity. If the current ambient water quality of a management zone is better than the applicable objectives, then that management zone has

⁵ State Water Resources Control Board. Administrative Procedures Update 90-004."Antidegradation Policy Implementation for NPDES Permitting".

assimilative capacity. The difference between the objectives and current ambient quality is the amount of assimilative capacity available.

Tables 1 and 2 show the established water quality objectives and the current ambient quality for TDS and nitrate-nitrogen for each management zone. These tables also list the TDS and nitrate-nitrogen assimilative capacity of the management zones, if any. Of the thirty-seven (37) management zones, twenty-one (21) lack assimilative capacity for TDS, and twenty-four (24) lack assimilative capacity for nitrate-nitrogen⁶. There are six (6) management zones for which there were insufficient data to calculate TDS and nitrate-nitrogen objectives and/or current assimilative capacity. These 6 management zones are assumed to have no TDS or nitrate-nitrogen assimilative capacity. Additional data will be needed if and when new projects using recycled water are proposed for those groundwater management zones where assimilative capacity has not been evaluated.

It is important to note that changes to the assimilative capacity findings may indicate a true trend in groundwater quality or may simply reflect fluctuations that occur naturally in response to variations in the amount of qualified data available. For example, as the watershed slowly urbanizes, old agricultural wells are abandoned and new municipal wells are installed. As a result, the dataset used to estimate groundwater quality is always changing. Two examples help illustrate this point. The first is the Chino-South Management Zone, where the average ambient TDS concentration appeared to increase by 150 mg/L between 2003 and 2006. Such a large change over such a short period of time is considered extremely unusual. Further analysis revealed that a significant number of wells that could not be used to calculate the 1997 or 2003 estimates due to lack of sufficient data did qualify for the 2006 update. Because of the improved dataset, the observed change in water quality represents a better and more accurate estimate of TDS concentrations for this management zone.

A similar phenomenon occurred in the Orange County Management Zone, where the average ambient TDS concentration appeared to increase by 30 mg/L in just three years (2003-2006). Once again, more detailed investigation of the underlying data showed that a number of additional wells became qualified for inclusion in the 2006 update. In this case, the added wells were situated on the far west side of the aquifer where sea water intrusion tends to increase salinity concentrations. When the new data were averaged together with all of the other water quality information from elsewhere in the management zone, TDS concentrations appeared to increase by about 30 mg/L.

Since similar situations are expected to occur in the future, the BMPTF has taken the initial steps to develop new "interpretive tools" that can be used to help distinguish true trends in water quality from the normal fluctuations caused by using a non-static dataset. As discussed in the WEI, 2011 Final Technical Memorandum, this analysis includes using "key wells" with a long period of water quality data collection to evaluate trends to cross-validate and corroborate such water quality trends. This analysis will be used in the future to aid in the understanding of assimilative capacity findings.

⁶ These assimilative capacity findings assume that the maximum benefit TDS and nitrate-nitrogen objectives for Chino North, Cucamonga, Yucaipa, San Timoteo, Beaumont and the San Jacinto Upper Pressure Management Zones are in effect. If maximum benefit objectives are not in effect and the antidegradation objectives apply instead, twenty-nine (29) Management Zones lack assimilative capacity for TDS and thirty-two (32) Management Zones lack assimilative capacity for nitrate nitrogen (see Tables 1 and 2).

Table 1. Water Quality Objectives, Ambient Water Quality, and Assimilative Capacity for TDS

Management Zone	Water Quality Objective (mg/L)	1997 ¹ Ambient (mg/L)	2003 ² Ambient (mg/L)	2006 ³ Ambient (mg/L)	2009 ⁴ Ambient (mg/L)	Assimilative Capacity (mg/L)
UPPER SANTA ANA RIVER BASIN						
Beaumont – “max benefit” ⁶	330	290	260	260	280	50
Beaumont – “antideg”	230	290	260	260	280	-50**
Bunker Hill A	310	350	320	330	340	-30**
Bunker Hill B	330	260	280	280	270	60
Colton	410	430	430	450	430	-20**
Chino North – “max benefit” ⁶	420	300	320	340	340	80
Chino 1 – “antideg”	280	310	330	340	340	-60**
Chino 2 – “antideg”	250	300	340	360	360	-110**
Chino 3 – “antideg”	260	280	280	310	320	-60**
Chino-South	680	720	790	940	980	-300**
Chino East	730	760	620	650	770	-40**
Cucamonga – “max benefit” ⁶	380	260	250	250	250	130
Cucamonga – “anti-deg”	210	260	250	250	250	-40**
Lytle	260	240	230	230	240	20
Rialto	230	230	220	230	230	0**
San Timoteo – “max benefit” ⁶	400	300	?	?	420 ⁷	-20**
San Timoteo – “anti-deg”	300	300	?	?	420 ⁷	-120**
Yucaipa – “max benefit” ⁶	370	330	310	310	320	50
Yucaipa – “antideg”	320	330	310	310	320	0**
MIDDLE SANTA ANA RIVER BASIN						
Arlington	980	?	1020	960	1020	-40**
Bedford	?	?	740	?	?	--**

Table 1. Water Quality Objectives, Ambient Water Quality, and Assimilative Capacity for TDS

[illegible]

Table 1. Water Quality Objectives, Ambient Water Quality, and Assimilative Capacity for TDS

Management Zone	Water Quality Objective (mg/L)	1997 ¹ Ambient (mg/L)	2003 ² Ambient (mg/L)	2006 ³ Ambient (mg/L)	2009 ⁴ Ambient (mg/L)	Assimilative Capacity (mg/L)
Irvine	910	910	880	920	910	0**
La Habra	?	?	?	?	?	--**
Orange County	580	560	560	590	600	-20**
Santiago	?	?	?	?	?	--**

Source: WEI, 2011

** → Indicates Management Zone has no assimilative capacity

? → Not enough data to estimate TDS concentrations; management zone is presumed to have no assimilative capacity. If assimilative capacity is demonstrated by an existing or proposed discharger, that discharge would be regulated accordingly.

¹ Data sampling period was 20 years (1954-1973) for historical ambient water quality computations.

² Data sampling period was 20 years (1978-1997) for current ambient water quality computations

³ Data sampling period was 20 years (1984-2003) for current ambient water quality computations.

⁴ Data sampling period was 20 years (1987-2006) for current ambient water quality computations.

⁵ Data sampling period was 20 years (1990-2009) for current ambient water quality computations.

⁶ Assimilative capacity created by “maximum benefit” objectives is allocated solely to agency(ies) responsible for “maximum benefit” implementation.

⁷ For the San Timoteo management zone, the 2009 ambient water quality was estimated using the data from January 1, 1991 to December 31, 2010 to allow for inclusion of data from monitoring wells installed in 2010. This methodology is a deviation from the methodology approved by the BMPTF that has been used to compute the ambient quality for other groundwater management zones. This revised methodology was discussed with the stakeholders in the San Timoteo area and is considered adequate given that there have been insufficient data to conduct computation for the 1987-2006 period.

Table 2. Water Quality Objectives, Ambient Water Quality, and Assimilative Capacity for Nitrate-nitrogen

Management Zone	Water Quality Objective (mg/L)	1997 ¹ Ambient (mg/L)	2003 ³ Ambient (mg/L)	2006 ⁴ Ambient (mg/L)	2009 ⁵ Ambient (mg/L)	Assimilative Capacity (mg/L)
UPPER SANTA ANA RIVER BASINS						
Beaumont – “max benefit” ⁶	5.0	2.6	2.0	1.6	2.5	2.5
Beaumont – “antideg”	1.5	2.6	2.0	1.6	2.5	-1.0**
Bunker Hill A	2.7	4.5	4.3	4.0	4.0	-1.3**
Bunker Hill B	7.3	5.5	5.8	5.4	5.4	1.9
Colton	2.7	2.9	2.9	2.9	2.8	-0.1**
Chino North – “max benefit” ⁶	5.0	7.4	8.7	9.7	9.5	-4.5**
Chino 1 – “antideg”	5.0	8.4	8.9	9.3	9.1	-4.1**
Chino 2 – “antideg”	2.9	7.2	9.5	10.7	10.3	-7.4**
Chino 3 – “antideg”	3.5	6.3	6.8	8.2	8.4	-4.9**
Chino-South	4.2	8.8	15.3	25.7	26.8	-22.6**
Chino East	10	29.1	9.6	12.7	15.7	-5.7**
Cucamonga – “max benefit” ⁶	5.0	4.4	4.3	4.0	4.1	0.9
Cucamonga – “anti-deg”	2.4	4.4	4.3	4.0	4.1	-1.7**
Lytle	1.5	2.8	2.7	2.7	2.6	-1.1**
Rialto	2.0	2.7	2.6	2.9	3.1	-1.1**
San Timoteo – “max benefit” ⁶	5.0	2.9	?	?	0.8 ⁷	4.2
San Timoteo – “anti-deg”	2.7	2.9	?	?	0.8 ⁷	1.9**
Yucaipa – “max benefit” ⁶	5.0	5.2	5.4	5.3	6.2	-1.2**
Yucaipa – “antideg”	4.2	5.2	5.8	5.3	6.2	-2.0**
MIDDLE SANTA ANA RIVER BASINS						
Arlington	10.0	--	26.0	20.4	18.1	-8.1**
Bedford	--	--	2.8	?	?	--**
Coldwater	1.5	2.6	2.4	2.6	2.8	-1.3**

Table 2. Water Quality Objectives, Ambient Water Quality, and Assimilative Capacity for Nitrate-nitrogen

Management Zone	Water Quality Objective (mg/L)	1997 ¹ Ambient (mg/L)	2003 ³ Ambient (mg/L)	2006 ⁴ Ambient (mg/L)	2009 ⁵ Ambient (mg/L)	Assimilative Capacity (mg/L)
Elsinore	1.0	2.6	2.4	2.4	2.2	-1.2**
Lee Lake	?	?	?	?	?	--**
Riverside A	6.2	4.4	4.9	4.9	5.2	1.0
Riverside B	7.6	8.0	7.8	8.3	8.4	-0.8**
Riverside C	8.3	15.5	15.5	15.3	14.8	-6.5**
Riverside D	10.0	?	?	?	?	--**
Riverside E	10.0	14.8	15.4	15.3	15.2	-5.2**
Riverside F	9.5	9.5	10.6	10.3	10.6	-1.1**
Temescal	10.0	13.2	12.8	12.6	12.0	-2.0**
Warm Springs	?	?	?	?	?	--**
SAN JACINTO RIVER BASINS						
Canyon	2.5	1.6	2.1	1.9	2.7	-0.2**
Hemet South	4.1	5.2	5.4	5.5	5.2	-1.1**
Lakeview – Hemet North	1.8	2.7	3.4	2.7	2.6	-0.8**
Menifee	2.8	5.4	6.0	4.7	4.4	-1.6**
Perris North	5.2	4.7	6.7	6.5	7.4	-2.2**
Perris South	2.5	4.9	5.9	5.5	5.8	-3.3**
San Jacinto Lower	1.0	1.9	1.8	1.2	1.1	-0.1**
San Jacinto Upper – “max benefit” ⁶	5.0	1.9	1.7	1.6	1.5	3.5
San Jacinto Upper – “anti-deg”	1.4	1.9	1.7	1.6	1.5	-0.1**
LOWER SANTA ANA RIVER BASINS						
Irvine	5.9	7.4	6.5	6.5	6.7	-0.8**

Table 2. Water Quality Objectives, Ambient Water Quality, and Assimilative Capacity for Nitrate-nitrogen

Management Zone	Water Quality Objective (mg/L)	1997 ¹ Ambient (mg/L)	2003 ³ Ambient (mg/L)	2006 ⁴ Ambient (mg/L)	2009 ⁵ Ambient (mg/L)	Assimilative Capacity (mg/L)
La Habra	?	?	?	?	?	--**
Orange County ⁸	3.4	3.4	3.1	3.0	3.0	0.4
Santiago	?	?	?	?	?	--**

Source: WEI, 2011

** → Indicates Management Zone has no assimilative capacity

? → Not enough data to estimate TDS concentrations; management zone is presumed to have no assimilative capacity. If assimilative capacity is demonstrated by an existing or proposed discharger, that discharge would be regulated accordingly.

¹ Data sampling period was 20 years (1954-1973) for historical ambient water quality computations.

² Data sampling period was 20 years (1978-1997) for current ambient water quality computations

³ Data sampling period was 20 years (1984-2003) for current ambient water quality computations.

⁴ Data sampling period was 20 years (1987-2006) for current ambient water quality computations.

⁵ Data sampling period was 20 years (1990-2009) for current ambient water quality computations.

⁶ Assimilative capacity created by “maximum benefit” objectives is allocated solely to agency(ies) responsible for “maximum benefit” implementation.

⁷ For the San Timoteo management zone, the 2009 ambient water quality was estimated using the data from January 1, 1991 to December 31, 2010 to allow for inclusion of data from monitoring wells installed in 2010. This methodology is a deviation from the methodology approved by the BMPTF that has been used to compute the ambient quality for other groundwater management zones. This revised methodology was discussed with the stakeholders in the Pass Area and is considered adequate given there have been insufficient data to conduct computation for the 1987-2006 period.

⁸ No assimilative capacity is assumed to exist in the Orange County Management Zone.

Assimilative capacity findings have significant regulatory repercussions. Water Code Section 13263 requires that waste discharge requirements must implement the Basin Plan. If there is assimilative capacity in the receiving waters for TDS or nitrate-nitrogen, waste discharge requirements may allow a discharge quality in excess of the current ambient quality and the objectives for those constituents, as long as the discharge does not cause violation of the objectives and is consistent with antidegradation requirements. However, if there is no assimilative capacity in the receiving waters, the discharge limits generally cannot exceed the receiving water objectives or the degradation process would be accelerated. This rule was expressed clearly by the State Water Resources Control Board in a decision regarding the appropriate TDS discharge limitations for the Rancho Caballero Mobile home park, located in the Santa Ana Region (Order No. 73-4, the “Rancho Caballero decision”).

Further, if there is assimilative capacity, the Regional Board also needs to consider whether the allowable discharge would consume some of the available assimilative capacity and if so, whether that lowering of ambient water quality should be allowed. Consistent with the State antidegradation policy (Resolution 68-16)⁷, allowing the lowering of water quality must be supported by the following demonstrations:

- that beneficial uses will continue to be protected;
- there is best practicable treatment or control of waste discharges; and,
- that water quality consistent with maximum benefit to the people of the state will be maintained.

Assimilative capacity findings are taken into account when developing and evaluating appropriate wastewater TDS and TIN discharge limits in any proposed NPDES and/or Waste Discharge Requirements. When considering allocating assimilative capacity, the Regional Board will follow the guidelines in State Board’s Recycled Water Policy (Resolution No.2011-0003) (see Section 5.0), the recent *Asociación de Gente Unida por El Agua v. Central Valley Regional Water Quality Control Board (AGUA)* court decision, and State Water Board antidegradation guidance, where appropriate.

Current ambient quality and assimilative capacity findings for the groundwater management zones in the Region are shown in the Basin Plan in Tables 5-3 (TDS) and 5-4 (Nitrate-Nitrogen). These tables are relied upon by Regional Board staff in preparing tentative waste discharge permit limitations. However, it is recognized that these tables have and can continue to become outdated as the findings are updated, unless a Basin Plan amendment process is used to update them. The Basin Plan amendment process is time and resource intensive and may not be able to be accomplished in a timely manner. Therefore, there is the potential that effluent limitations for TDS and/or nitrate-nitrogen specified in accordance with the assimilative capacity findings in the tables would not be supported by the best available information regarding assimilative capacity. To address this problem, Board staff recommends that Tables 5-3 and 5-4 be replaced by text to make clear that the Regional Board will take formal notice of the updated ambient quality findings at a public meeting, with the opportunity for public comment. Once considered and approved by the Regional Board, these updated findings will be used for regulatory purposes and posted on the Regional Board’s web-site.

⁷ “Statement of Policy with Respect to Maintaining the High Quality of Waters in California”

The revised Total Dissolved Solids (TDS) and nitrate-nitrogen (NO₃-N) assimilative capacity findings discussion are shown in the Attachment to Resolution No. R8-2014-0005, Chapter 5, Implementation. Text is proposed to be added to make clear that the assimilative capacity findings will be updated every three years, as required by the Basin Plan. The Regional Board will take formal notice of the updated findings at a public meeting, with the opportunity for public comment. The updated findings will be used for regulatory purposes after they are considered by the Regional Board.

5.0 Deletion of Discussion Related to Wastewater Reclamation

The Basin Plan, Chapter 5, Section IIIB.5 states the following with respect to Wastewater Reclamation:

“Reclamation of wastewater for reuse (recycled water) is an important feature of wastewater and water management for the Santa Ana Region. The California Legislature has declared the primary interest of the people of California in the development of facilities to recycle wastewater to supplement existing water supplies and to meet future water demands (Water Code Section 13510-13512). State policy (State Board Resolution No. 77-1) affirms this commitment to encourage recycled water use.”

In 2009, State Water Resources Control Board (State Water Board) adopted a Recycled Water Policy (Resolution No. 2009-0011). Recognizing the statewide benefits of reusing water, the State Water Board set a goal to increase the use of recycled water by at least one million acre-feet in the next 10 years and two million acre-feet by 2030. That goal is consistent with the 2020 Water Conservation Plan (California Department of Water Resources, 2010), which identified recycled water as a key element of the strategy to reduce statewide per capita urban water use by 20% over the next decade.

The Santa Ana Water Board supports the State Board's call "to increase the use of recycled water in a manner that protects water quality as required by state and federal law." In fact, the Santa Ana Water Board has played a lead role in the development of recycled water regulation, and many of the elements of the Santa Ana Water Board's approach for salt management are reflected in the State Water Board's policy. On March 18, 2010, the Santa Ana Water Board adopted the "Declaration of Conformance with the Recycled Water Policy", which demonstrates that the 2004 Salt Management Plan and subsequent BMPTF actions and activities are consistent with and fulfill requirements of the State Water Recycled Policy (RWQCB, Resolution No. R8-2010-0012).

Table 5-7 in the Basin Plan contains a list of reclamation activities that were planned in the Region as of the early 2000s. This information is both out of date and unnecessary and staff recommends that Table 5-7 and related text concerning planned reclamation activities be deleted. Staff proposes that text be added to indicate that updated information on the quantity and quality of reclaimed (recycled) water that is used or proposed to be used in various areas of the Region is provided with each POTW's report of waste discharge (ROWD). This information is then included in the waste discharge requirements issued by the Regional Board to each facility. This is a more accurate and timely method of updating information concerning recycled water use.

The changes to the Basin Plan text updating the wastewater reclamation section do not result in any change in established regulatory practice. The proposed changes to the text merely delete outdated reclamation information and clarify and update information regarding established regulatory practice and conformance with State Water Board policy.

The proposed changes to the Wastewater Reclamation discussion are shown in the Attachment to Resolution No. R8-2014-0005, p. 3 and 4, Chapter 5, Implementation, Reclamation discussion, including Table 5-7.

6.0 Incorporation of Nitrogen Loss Coefficient for the San Jacinto Groundwater Management Zones

The Regional Board's regulatory program has long recognized that some nitrogen⁸ transformation and loss can occur when wastewater is discharged to surface waters or reused for landscape irrigation. Despite this, nitrogen was long considered a conservative constituent in the subsurface, not subject to significant transformation or loss, and no such losses were identified or assumed for regulatory purposes. However, based on an evaluation of existing data as part of the 2004 update of the Salt Management Plan, a default 25% nitrogen loss coefficient was incorporated into the Basin Plan. This default value represents a conservative value of expected subsurface nitrogen loss from waste discharges for the entire Region based on the data that were available at that time. The 25% nitrogen loss coefficient provides some relief from costs for additional treatment to meet the proposed groundwater management zone objectives when subsurface nitrogen losses could achieve the requisite reductions. Further, as a region-wide default value, the 25% nitrogen loss coefficient can be used with confidence to develop waste discharge limits for nitrogen discharges throughout the Region that would protect the quality of affected groundwater management zones. The nitrogen loss coefficient applies to discharges that affect groundwater management zones with and without nitrate-nitrogen assimilative capacity. The Basin Plan includes equations for calculating nitrogen limitations for discharges to waters with and without assimilative capacity.

The San Jacinto Basin and groundwater management zones shown in Figure 2 are located in southwestern Riverside County. One of the major features of this Basin is the extensive groundwater resources that serve as a vital source of water supply in the area. Eastern Municipal Water District (EMWD) is the principal agency responsible for managing the groundwater resources in the San Jacinto Basin. EMWD owns and operates four regional water reclamation facilities (RWRFs) and is authorized to discharge from these four RWRFs in the San Jacinto Basin pursuant to Regional Board Order No. R8-2008-0008. EMWD produces tertiary treated wastewater that is discharged to various storage ponds; the stored recycled water is delivered, when needed, to various recycled water users. The use areas and storage ponds overlie the following Management Zones: Perris North, Perris South, San Jacinto Lower Pressure, San Jacinto Upper Pressure, Lakeview & Hemet North, Menifee, and Hemet South. The only other Management Zone in the San Jacinto Basin, the Canyon Management Zone, receives no recycled water.

⁸ Nitrogen refers to nitrate-nitrogen in groundwaters and total inorganic nitrogen in surface waters.

Of the eight management zones in EMWD's service area, only the San Jacinto Upper Pressure has nitrogen assimilative capacity (see Table 2)⁹. As a result, nitrogen limits for EMWD's discharge can be restrictive even with application of the default 25% default nitrogen loss coefficient and can severely restrict the use of recycled water. However, if greater nitrogen losses can be demonstrated through actual site-specific studies, then a higher loss coefficient can be used in calculating effluent limits. The resultant limits are less stringent, which, in turn provides EMWD with greater operational flexibility. EMWD retained Daniel B. Stephens & Associates (DBS&A) to evaluate the subsurface underneath the recycled water storage ponds to determine if a greater nitrogen loss coefficient could be justified (Daniel B. Stephens & Associates. 2007) .

To evaluate nitrogen losses, DBS&A evaluated specific EMWD wastewater storage operations at two of the EMWD facilities: storage ponds at the Moreno Valley Regional Water Reclamation Facility in Moreno Valley, which overlie the Perris North Management Zone, and the Alessandro Ponds in San Jacinto, which overlie the San Jacinto Upper Pressure Management Zone (see Figure 2). As part of this evaluation, DBS&A installed a series of pore water monitoring devices: lysimeters at the Alessandro Ponds and groundwater monitoring wells at the Moreno Valley Regional Water Reclamation Facility. DBS&A also concurrently monitored water quality in each of the pond systems to allow for comparisons with the pore water and groundwater quality results. This allowed for an evaluation of whether the pore water and/or groundwater quality was influenced by recycled water quality stored in the ponds and how much nitrogen in the ponds was removed through transformation.

Based on this evaluation, DBS&A concluded the following:

- Total nitrogen concentrations decreased by approximately 60 – 80% at the two EMWD facilities.
- Hydrogeological conditions at the Moreno Valley Regional Water Reclamation Facilities and the Alessandro Ponds are different, yet nitrogen losses at both facilities in the upper 30 or so feet are similar. Given that similar hydrogeological conditions exist beneath similarly operated ponds at other locations within the EMWD service area, nitrogen losses consistent with those at the two EMWD facilities evaluated are expected.
- An estimated range of total nitrogen reductions would also likely be in the 60 to 80% range at all of the EMWD facilities.

Regional Water Board staff recommend that the Basin Plan be updated to reflect the site-specific nitrogen loss coefficient in the San Jacinto Basin management zones. The 60% nitrogen loss coefficient would be applied to discharges to all of the EMWD storage ponds.

For the management zone with assimilative capacity (currently, the San Jacinto Upper Pressure), the TIN discharge limitation would be calculated as follows:

$$\text{TIN Discharge Limit (mg/L)} = \frac{\text{MZ nitrate-nitrogen current ambient water quality}}{(1 - \text{nitrogen loss coefficient})}$$

⁹ The San Jacinto Upper Pressure Management Zone has nitrate-nitrogen assimilative capacity as long as the Maximum Benefit Objectives are in effect.

For the remaining San Jacinto management zones, which have no assimilative capacity, the TIN discharge limitation would be calculated as follows:

$$\text{TIN Discharge Limit (mg/L)} = \frac{\text{MZ nitrate-nitrogen water quality objective}}{(1-\text{nitrogen loss coefficient})}$$

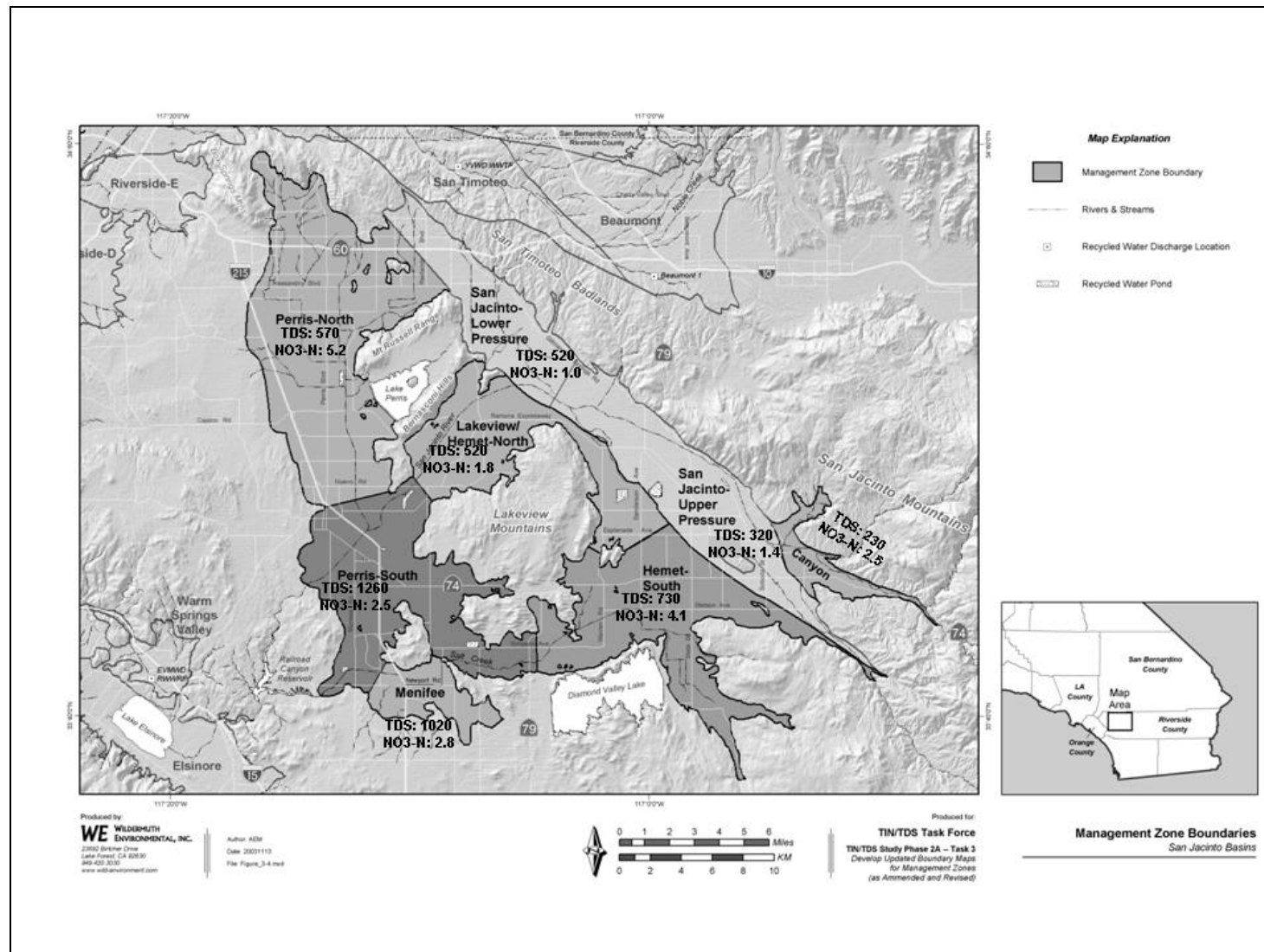
The proposed addition of the San Jacinto Basin specific nitrogen loss coefficient is shown in the Attachment to Resolution No. R8-2014-0005, Chapter 5, Implementation.

7.0 Update of Salt Management Plan “Other Projects and Programs”

Incorporated into the Salt Management Plan in 2004 are descriptions of various projects and programs that water supply agencies and wastewater agencies plan and/or continue to implement to address salt. Since 2004, a number of the projects have been discontinued or there are changes to the status. Therefore, based on input from the BMPTF, staff proposes to update the projects/programs descriptions in this section. The recommended changes are descriptive only and have no regulatory implications.

The proposed changes to the Other Projects and Programs discussion are shown in the Attachment to Resolution No. R8-2014-0005, Chapter 5, Implementation, Other Projects and Programs

Figure 2. San Jacinto Management Zones



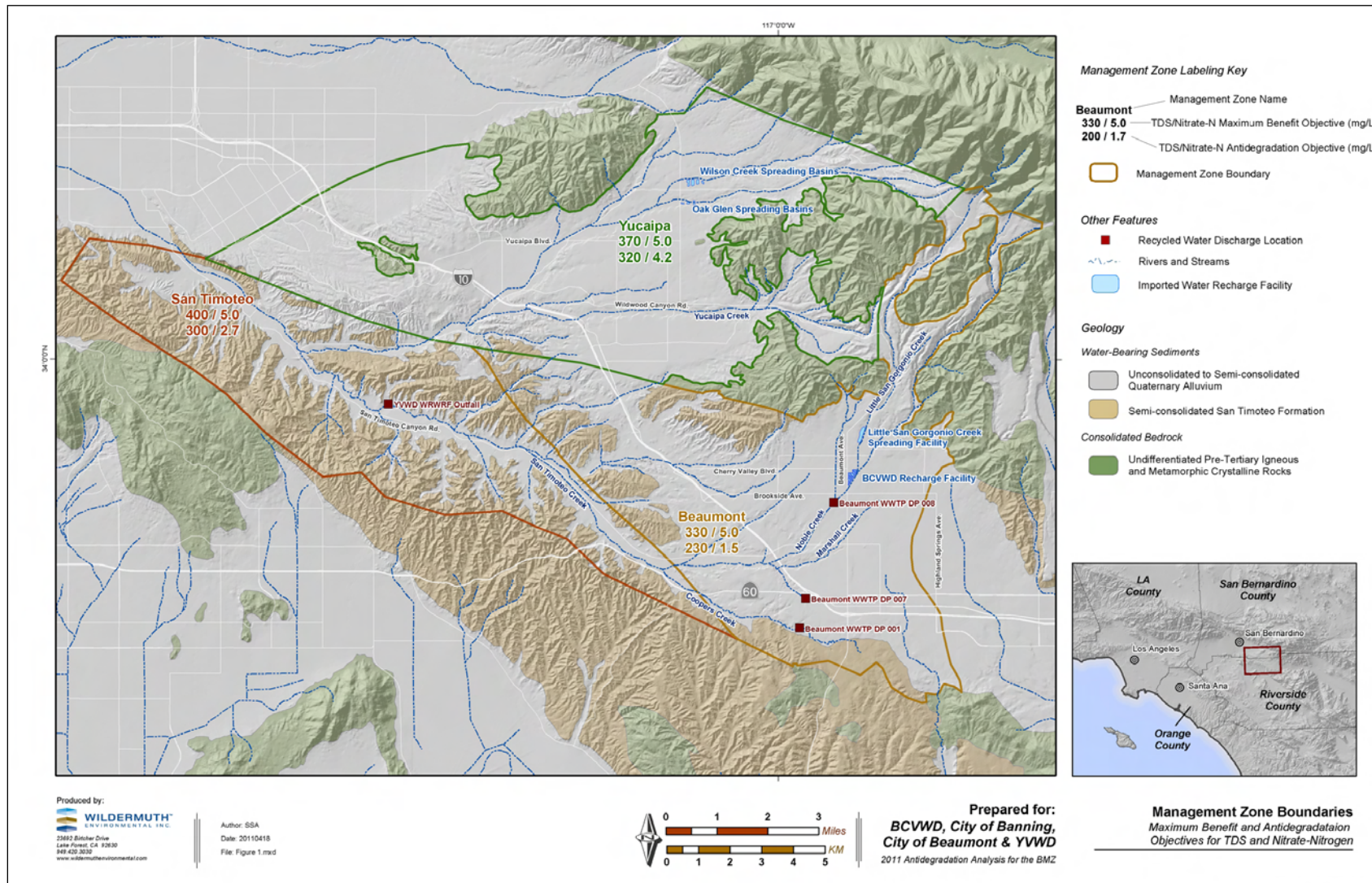
8.0 Update of the Beaumont, San Timoteo and Yucaipa Management Zone Maximum Benefit Programs

8.1 Background and Recent Developments in the Beaumont, San Timoteo and Yucaipa Management Zones

As part of the development of the 2004 Salt Management Plan, several agencies proposed alternative, less stringent TDS and nitrate-nitrogen objectives for specific groundwater management zones. The intent was to accommodate efficient water and wastewater management programs, including the increased use of recycled water. These proposals were based on the requirements of the State's antidegradation policy (State Board Resolution No. 68-16) and on consideration of the factors specified in Water Code Section 13241, including economics, the need to use recycled water, and the need to develop housing in the area. Because the less stringent objectives would allow for a lowering of water quality, the agencies recommending them were required to demonstrate that their proposed objectives would protect beneficial uses and that water quality consistent with the maximum benefit of the people of the state would be maintained. Thus, the objectives were termed "maximum benefit" water quality objectives. Among the agencies that proposed "maximum benefit" objectives for their underlying management zones were the Yucaipa Valley Water District (YVWD), the City of Beaumont, and members of the San Timoteo Watershed Management Authority (STWMA).

San Timoteo Watershed Management Authority (STWMA) was formed in January 2001 by the Beaumont Cherry Valley Water District (BCVWD), the City of Beaumont, the South Mesa Water Company and Yucaipa Valley Water District (YVWD). STWMA formed a stakeholder group to develop a watershed scale water resources management program that would provide a safe and reliable water supply for all water users in the watershed. On June 26, 2002, STWMA submitted a proposal to establish "maximum benefit" objectives for TDS and nitrate-nitrogen for the Beaumont, San Timoteo and Yucaipa groundwater management zones, to accommodate water resource management projects, including the recharge of stormwater, imported State Project Water (SWP) and recycled water. On January 23, 2003, YVWD submitted a separate maximum benefit proposal for the Yucaipa and San Timoteo Management Zones. The Regional Board adopted the maximum benefit proposals in 2004 as part of the larger salt and nutrient management plan update (Resolution R8-2004-0001). This included specific implementation commitments designed to comply with antidegradation policy requirements. The affected management zones are shown in Figure 3.

Figure 3. San Timoteo Watershed Management Zone Boundaries/ Yucaipa Valley Water District and City of Beaumont Wastewater Discharge Locations



The 2004 Basin Plan Amendment specified a set of commitments to be implemented by YVWD for the Yucaipa Management Zone and the lower portion of the San Timoteo Management Zone (Basin Plan, Table 5-9a). A separate set of commitments were specified for STWMA and the City of Beaumont to implement in the Beaumont Management Zone and the upper portion of the San Timoteo Management Zone (Basin Plan, Table 5-10a). Since 2004, many developments have occurred in these three management zones and to the agencies responsible for implementing the maximum benefit commitments. The following sections summarize these developments in each of the three management zones.

Yucaipa Management Zone

YVWD has been and remains the sole agency responsible to implement the maximum benefit commitments in the Yucaipa Management Zone. Since the adoption of the maximum benefit management plan for the Yucaipa Management Zone, YVWD has been successfully implementing the maximum benefit commitments specified in Table 5-9a. YVWD has been conducting surface water and groundwater monitoring and reporting on schedule, contributing financially to the Basin Monitoring Program Task Force (BMPTF) to update the wasteload allocation model and the re-computation of the ambient quality of the groundwater management zones, and has upgraded the District's waste water treatment plant for nitrogen removal. YVWD has been proactive in salt management activities within its service area. Specifically, YVWD designed and is in the process of completing a desalter and the associated Yucaipa Valley Brineline project (extension of the SARI line). In 2008, the YVWD Board adopted Resolution No. 11-2008, which identified pollution prevention measures that the District will implement to eliminate pollution sources contributing to salinity in excess of the TDS objectives, such as requirements for new development to connect to sewers, a dry sewer collection system in anticipation of new development, and a sewer septic offset program.

San Timoteo Management Zone

Per the Basin Plan, YVWD and the City of Beaumont/STWMA have been jointly responsible for implementing the maximum benefit commitments in the San Timoteo Management Zone. In 2008, Regional Board staff informed YVWD and the City of Beaumont/STWMA that they had fulfilled most maximum benefit commitments except the commitments to compute the ambient water quality for the San Timoteo Management Zone, and to reduce/remove wastewater discharges to the unlined portion of San Timoteo Creek (Tasks #6 and #9 in Tables 5-9a and 5-10a of the Basin Plan).

As shown in Tables 1 and 2, due to a lack of data, the ambient TDS and nitrate-nitrogen quality in the San Timoteo Management Zone could not be calculated for the 2003, 2006 and 2009 assessment periods (see Section 4 - Assimilative Capacity Findings, above). YVWD and the City of Beaumont's treatment plant effluents are both discharged directly to the San Timoteo Management Zone. Since the 1997 ambient water quality determination, there have been insufficient data to regularly update and evaluate the ambient water quality and the impact of the wastewater discharges on the San Timoteo Management Zone. To address this, YVWD and the City of Beaumont/STWMA contracted with Wildermuth Environmental, Inc. to prepare a joint proposed workplan to install additional monitoring wells in the San Timoteo Management Zone (WEI 2008). The Regional Board approved the Workplan on April 24, 2009 (Resolution No. R8-2009-0034 for YVWD and Resolution No. R8-2009-0035 for the City of Beaumont/STWMA). On July 27, 2010, Regional Board staff approved a revised schedule for monitoring well installation and directed YVWD and the City

of Beaumont to perform a preliminary assessment of ambient water quality and assimilative capacity in the San Timoteo Management Zone. The assessment was characterized as preliminary for the 2009 recomputation because it was recognized that the assessment data would not meet the data criteria for the computation of ambient water quality per the BMPTF agreed upon methodology¹⁰. The data collected are expected to be used for the 2012 ambient quality determination period that will be completed in 2014. YVWD and the City of Beaumont completed the well installation and water sampling and analysis in August 31, 2010¹¹.

The 2010 preliminary estimate of ambient TDS and nitrate-nitrogen quality and assimilative capacity findings for the San Timoteo Management Zone completed by Wildermuth Environmental Inc. on behalf of YVWD and the City of Beaumont (WEI, 2010), utilized a modified methodology: the computation period was shifted to the 20-year period of January 1, 1991 to December 31, 2010 to allow for inclusion of results from the monitoring wells constructed in 2010 (The 20-year period for the 2009 re-computation of ambient groundwater quality was January 1, 1990 to December 31, 2009 for the rest of Management Zones in the Santa Ana Region). The results of this assessment are shown below in Table 3.

Table 3. San Timoteo Management Zone - Preliminary Ambient Water Quality Determination

	“Antidegradation” WQO (mg/L)	“Maximum Benefit” WQO (mg/L)	2010 Preliminary Current Ambient Quality (mg/L)	2010 Preliminary Assimilative Capacity (mg/L)
TDS	300	400	420	-20**
NO ₃ -N	2.7	5	0.8	4.2

Source: WEI, 2010

** → Indicates Management Zone has no assimilative capacity in comparison to the “maximum benefit objectives”

As shown in Table 3 above, the preliminary results indicate that, in comparison to the maximum benefit objectives, there is no assimilative capacity for TDS in the San Timoteo Management Zone. Consequently, YVWD and the City of Beaumont effluent discharges are required to meet the maximum benefit objective for TDS. Pursuant to the July 27, 2010, Regional Board staff letter, if no assimilative capacity was found, by December 31, 2010, YVWD and the City of Beaumont were required to develop and submit a compliance plan

¹⁰ The methodology to re-compute the ambient water quality requires a minimum of 3 annual TDS and nitrate-nitrogen measurements at each well. This methodology is a deviation from the methodology approved by the BMPTF that has been used to compute the ambient quality for other groundwater management zones. The revised methodology was discussed with the stakeholders in the Pass Area and the Water Board staff and was considered necessary because there had been insufficient data for the ambient quality computation for the 1990-2009 and prior computation periods.

¹¹ By July 2010, STWMA had dissolved and was no longer a responsible party for implementation of maximum benefit program commitments in the San Timoteo Management Zone (see also the discussion on the Beaumont Management Zone).

and schedule to comply with the maximum benefit objectives. YVWD and the City of Beaumont submitted a draft compliance plan by the deadline, and requested that the schedule for submittal of the final compliance plan be extended pending the completion of the modeling analysis and development of a revised implementation plan for the maximum benefit commitments for the Beaumont Management Zone (see below). Considering that YVWD and the City of Beaumont have water management activities in both the Beaumont and San Timoteo Management Zones, and that it is important to have a consistent approach in implementing the maximum benefit commitments in both these management zones, Regional Board staff approved the time extension (Regional Board, 2011)¹². Both YVWD and the City of Beaumont wastewater discharges to the San Timoteo Management Zone will be held at the TDS “maximum benefit” objective of 400 mg/L. In 2012, YVWD’s effluent quality ranged from 395 to 460 mg/L with an annual average of 434 mg/L. For the City of Beaumont, the 2012 TDS quality ranged from 360-480 mg/L and the annual average was 400 mg/L.

Beaumont Management Zone

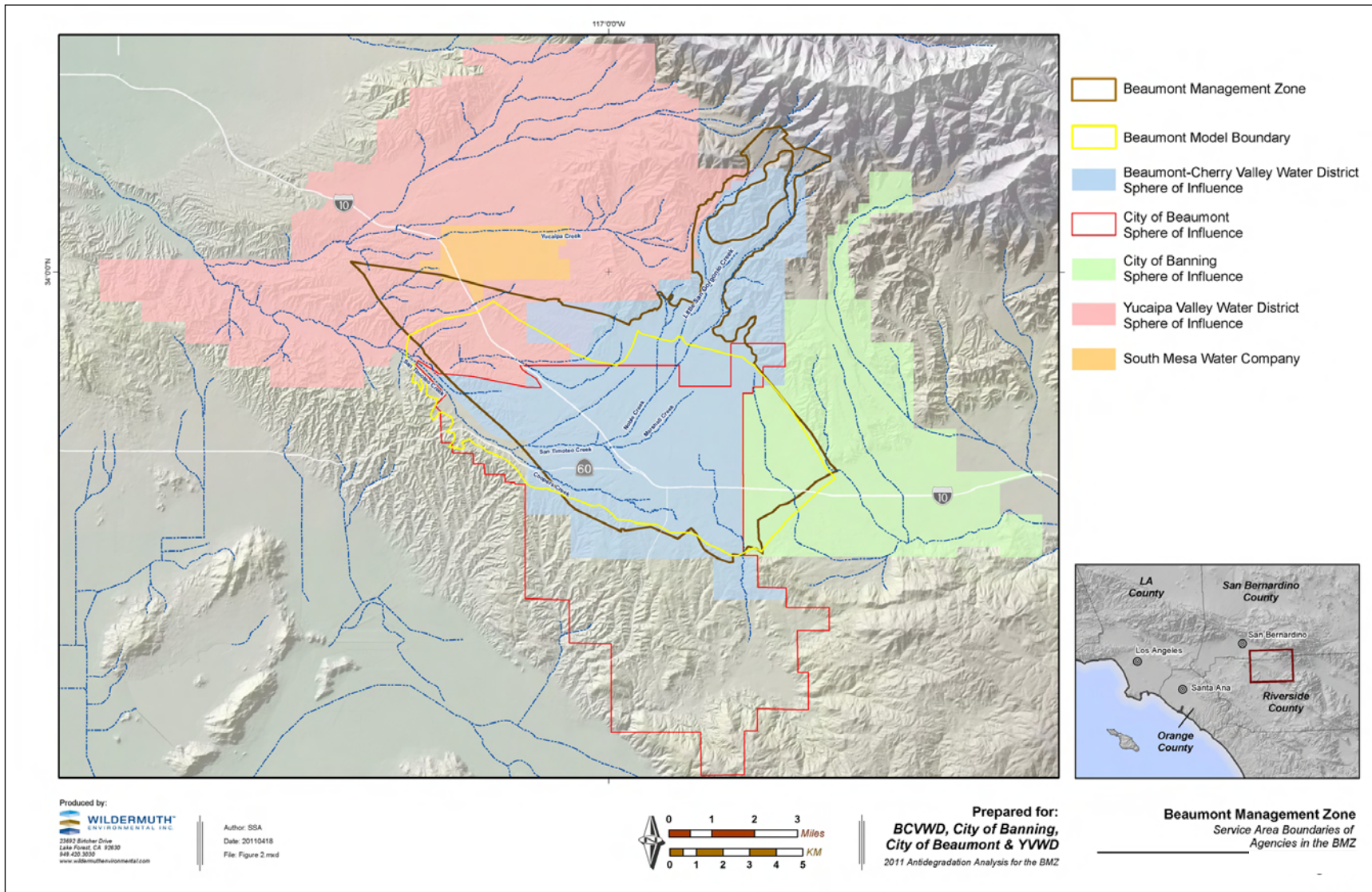
Water resource management activities and plans in the Beaumont Management Zone, and the parties responsible for them, have changed from the maximum benefit program specified in the 2004 Basin Plan. In 2009, both YVWD and BCVWD withdrew from STWMA; in July 2010, STWMA withdrew from the BMPTEF, which effectively dissolved STWMA. By virtue of the dissolution of STWMA, the South Mesa Water Company also was no longer a STWMA member. The City of Beaumont continued the surface water and groundwater monitoring and reporting programs for the Beaumont Management Zone and the upper portion of the San Timoteo Management Zone, and continued to contribute to the BMPTEF for update of the wasteload allocation (WLA) model and the recomputation of ambient groundwater quality. In addition, the partnership between BCVWD and the City of Beaumont to complete the non-potable water supply system and to provide recycled water for non-potable uses broke down (Task 4, Table 5-10a in the Basin Plan).

After losing the anticipated recycled water from the City of Beaumont and in order to meet water supply demands, BCVWD began to work with YVWD and the City of Banning to import recycled water for recharge and direct reuse for irrigation. Since 2009, BCVWD has worked with Water Board staff to develop a permit for the recharge and reuse of the recycled water. The overall approach, consistent with the established maximum benefit program, is to blend recycled water with stormwater and imported State Project Water (SWP) in the Beaumont Management Zone (see Task 5, Table 5-10a).

Meanwhile, in 2009, YVWD also requested revision of its NPDES permit to include the use of recycled water for irrigation in its service area in the Beaumont Management Zone. At the same time, it was brought to Regional Board staff’s attention that the City of Banning is considering the use of recycled water in a newly planned community and an existing community that are located within the Beaumont Management Zone. Figure 4 depicts the overlying service area boundaries for all of these agencies.

¹² Note: the February 2, 2011 letter to the City of Beaumont was a disapproval of the City’s proposed mitigation plan for the San Timoteo Management Zone. The letter did approve a time extension for the submittal of the final mitigation plan.

Figure 4. Beaumont Management Zone Agency Service Area Boundaries



In 2009, the City of Beaumont requested and the Regional Board approved the addition of two new discharge points in the Beaumont Management Zone, DP#007 and DP#008 (Order No. R8-2009-0002), in addition to the existing discharge location at Cooper's Creek (DP#001). The City of Beaumont reduced the discharge of recycled water to Cooper's Creek, a tributary to San Timoteo Creek and the San Timoteo Management Zone, in order to meet commitment #9 in Table 5-10a. This provision requires the City of Beaumont to remove/reduce its discharge of effluent from the unlined portion of San Timoteo Creek. However, the additional surface discharge of Beaumont WWTP effluent to the Beaumont Management Zone at DP#007 and DP#008 was not considered in the original maximum benefit proposal.

To address the change of stakeholders and to evaluate the impacts of the newly proposed recharge and reuse projects on the water quality of the Beaumont Management Zone, on September 13, 2010, Water Board staff issued a Water Code Section 13267 Order requesting that YVWD, the City of Beaumont and BCVWD conduct an analysis to provide a 30-year projection of TDS and nitrate-nitrogen quality in the Beaumont management zone under several foreseeable water management scenarios. The parties were also ordered to submit a proposed new maximum benefit implementation plan that would specify the implementation responsibilities of each of the agencies that wanted to participate in the maximum benefit program and thereby avail themselves of the application of the maximum benefit objectives. The agencies contracted with Wildermuth Environmental, Inc. (WEI) to conduct the model projections. Two other agencies that also have water resource and water management responsibilities in the area overlying the Beaumont Management Zone, the San Gorgonio Pass Water Agency (Pass Agency) and the City of Banning, joined the study effort. In addition, Board staff were active participants in the effort.

The model analysis was completed in May 2011. On September 20, 2011, YVWD, BCVWD, the City of Banning and the Pass Agency submitted a draft proposed regional implementation strategy for the maximum benefit commitments (Regional Strategy) for the Beaumont Management Zone [City of Banning, BCVWD, Pass Agency, YVWD, 2011]. The Regional Strategy initially addressed the Maximum Benefit program in the Beaumont Groundwater Management Zone; however, in order to have a consistent approach throughout the San Timoteo Watershed, the Regional Strategy approach was expanded to the San Timoteo and Yucaipa Groundwater Management Zones.

The following is a summary of the proposed Regional Strategy:

The proposed Regional Strategy to implement the maximum benefit program consists of a regional approach with multi-agency participation. Specifically, the Yucaipa Valley Water District (YVWD) is in the process of completing an extension of the Santa Ana Regional Interceptor brineline from the City of San Bernardino Wastewater Treatment Plant to YVWD's Wochholz Regional Water Recycling Facility. This brineline extension (the "Yucaipa Valley Regional Brineline") and associated reverse osmosis facilities are scheduled to be completed and operational by the second quarter of 2014. With the completion of the brineline and reverse osmosis facilities, the "maximum benefit" objectives necessary to protect the water resources of the Beaumont, Yucaipa and San Timoteo Management Zones will be achieved for YVWD and users of the recycled water produced by YVWD's Wochholz Regional Water Recycling Facility.

Compliance with the commitment to meet the underlying management zone TDS maximum benefit water quality objectives will be demonstrated by ensuring that the 10-year running average TDS quality of recycled water, used for irrigation, surface water discharge or recharge (planned or incidental), will be better than or at the maximum benefit objectives of the particular management zone where the recycled water is used or applied, *i.e.*,

- 370 mg/L for Yucaipa MZ,
- 400 mg/L for San Timoteo MZ, and
- 330 mg/L for Beaumont MZ.

The proposal proponents expect to achieve compliance by blending or desalting the recycled water supply¹³. The strategy does not recommend TDS or TIN wasteload allocations for the surface discharge from the YVWD WWTP and the City of Beaumont WWTP, as was the case in the 2004 Basin Plan amendment. The proposed strategy recommends that compliance be measured in the recycled water system for irrigation use and at the point of discharge for surface water discharge and recharge activities.

Agencies that have signed proposed strategy include YVWD, the City of Banning, Beaumont Cherry Valley Water District, San Geronio Pass Water Agency and Yucaipa Valley Water District. The City of Beaumont submitted a separate proposal to implement the maximum benefit commitments for the Beaumont Management Zone on November 23, 2011 (City of Beaumont, 2011).

On January 23, 2012, Water Board staff tentatively approved the Regional Strategy and encouraged the City of Beaumont to join with the other water resources management agencies to implement the Regional Strategy (Regional Board, 2012). The Board staff letter also clarified that the effluent limits based on the wasteload allocation for Santa Ana River discharges (Basin Plan, Table 5-5) are not appropriate for discharges that overlie the Beaumont or San Timoteo Management Zones because surface discharge of the recycled water mainly recharges the underlying management zones, and does not impact the Santa Ana River. The letter further states that effluent limits for surface discharges in the Beaumont Management Zone would be revised to implement the "maximum benefit" objectives, if the maximum benefit commitments are met to the satisfaction of the Water Board, or the antidegradation objectives, if the maximum benefit commitments are not met. On May 1, 2012, the City of Beaumont City Council adopted Resolution No. 2012-18 to support the Regional Strategy and thereby participate in the maximum benefit program. The agencies have also agreed to continue implementing the commitments made by the now dissolved San Timoteo Watershed Management Authority in order to maintain the maximum benefit objectives in the Beaumont and San Timoteo management zones. The commitments include surface and groundwater monitoring and reporting, building a desalter and brine line facility, providing recycled water for non-potable water supply, recharging recycled water and determining ambient groundwater quality.

¹³ The Regional Strategy proposes that all recycled reuse be evaluated on a 10-year compliance schedule. Board staff believe that this is appropriate for recycled water reuse through the non-potable system and for groundwater recharge. For surface water discharge, Board staff recommends an annual compliance schedule that is consistent with NPDES permit terms.

8.2 Current Ambient Quality and Assimilative Capacity Findings for Beaumont, Yucaipa and San Timoteo Groundwater Management Zones

As shown in Table 4, the Basin Plan specifies “Antidegradation” and alternative, “Maximum Benefit” objectives for TDS and nitrate-nitrogen for the Beaumont, Yucaipa, and San Timoteo management zones. Table 4 shows the current ambient TDS and nitrate-nitrogen quality for these management zones. Current ambient quality is generally computed using the data from the 1990-2009 sampling period. However, the ambient quality for the San Timoteo Management Zone was estimated using data from January 1, 1991 to December 31, 2010 to allow for inclusion of results from monitoring wells constructed and sampled in 2010 (see preceding discussion).

Table 4. “Antidegradation” and “Maximum Benefit” Objectives for the Beaumont, Yucaipa, and San Timoteo Groundwater Management Zones

Management Zone	“Antidegradation” WQO		“Maximum Benefit” WQO		Current (2009) Ambient Quality	
	TDS mg/L	NO ₃ -N mg/L	TDS mg/L	NO ₃ -N mg/L	TDS mg/L	NO ₃ -N mg/L
Beaumont	230	1.5	330	5.0	280	2.5
Yucaipa	320	4.2	370	5.0	320	6.2
San Timoteo	300	2.7	400	5.0	420 ¹	0.8 ¹

¹ Preliminary assessment; see discussion. The ambient water quality for San Timoteo groundwater management zone was estimated using the data from January 1, 1991 to December 31, 2010 to allow for inclusion of data from monitoring wells installed in 2010.

Proposed Modification of the Yucaipa, San Timoteo and Beaumont Management Zones, Maximum Benefit Programs

Per the current Basin Plan, the application of the “maximum benefit” objectives is contingent upon the implementation of a series of projects and programs in Yucaipa and the lower portion of the San Timoteo Management Zones by YVWD, and by the City of Beaumont and STWMA in the Beaumont and the upper portion of the San Timoteo management zones. These programs are summarized in Tables 5-9a and 5-10a in the Basin Plan. As discussed above, STWMA has been dissolved, and the parties have developed and agreed to a Regional Strategy necessitating the changes to the Basin Plan recommended herein. These projects and programs are designed to ensure and demonstrate that (i) beneficial uses are being protected and (ii) water quality consistent with the maximum benefit to the people of the state is being maintained.

In order to reflect these changes to the maximum benefit programs, Board staff proposes that for each of the San Timoteo Watershed groundwater management zones (Yucaipa, San

Timoteo and Beaumont Management Zones), the appropriate agencies be identified and the specific commitments relative to that management zone be identified. As such, revisions to the existing Basin Plan Maximum benefit tables for the Yucaipa/San Timoteo Management Zones (Table 5-9a) and the Beaumont/San Timoteo Management Zones (Table 5-10a) are discussed below with reference to the existing Basin Plan commitments.

8.3 Modification of the Yucaipa Management Zone Maximum Benefit Programs

The 2004 Basin Plan specified a maximum benefit program for the Yucaipa Management Zone with responsibility assigned to YVWD. The current status of the implementation of the YVWD maximum benefit program incorporated into the Basin Plan in 2004 is discussed below (section 8.3.1). YVWD, whose jurisdiction overlies Yucaipa Management Zone (as well as portions of the San Timoteo and Beaumont Management Zones), is solely responsible for implementing the maximum benefit program in the Yucaipa Management Zone. Based on the activities by YVWD, several modifications to the existing program are proposed as discussed below in Section 8.3.2.

8.3.1 Compliance Status of the Yucaipa Valley Water District's Maximum Benefit Commitments in Yucaipa and Lower Portion of the San Timoteo Management Zones

Table 5-9a of the Basin Plan identifies the projects and requirements (the "maximum benefit commitments") that must be implemented by YVWD to demonstrate that water quality consistent with the maximum benefit to the people of the state will be maintained. Table 5 below provides a summary of each commitment specified in the Basin Plan and the status of compliance with those requirements by YVWD.

Per the current Basin Plan, it is assumed that maximum benefit is demonstrated and that the "maximum benefit" objectives apply to the Yucaipa and San Timoteo Management Zones as long as the schedule specified in Table 5-9a is being met and the commitments are satisfied. (For the San Timoteo Management Zone, the application of the "maximum benefit" objectives is also contingent on satisfactory implementation of specific commitments by the City of Beaumont and STWMA. These commitments are shown in Table 5-10a). If the Regional Board determines that the maximum benefit program is not being implemented effectively in accordance with the schedule shown in Table 5-9a (and, for San Timoteo, Table 5-10-a), then maximum benefit is not demonstrated, and the antidegradation objectives for TDS and nitrate-nitrogen for the Yucaipa and San Timoteo Management Zones apply. In this case, the Basin Plan requires that any TDS and nitrate-nitrogen discharges to these management zones in excess of the antidegradation water quality objectives would need to be mitigated. The finding that the "maximum benefit" commitments are not being met and that mitigation is subsequently required is subject to Regional Water Board approval at a public meeting.

As can be seen in Table 5, YVWD has demonstrated that it has met all of the maximum benefit commitments for Yucaipa and the lower portion of the San Timoteo Management Zones as of November 2010 (please see also the discussion in Section 8.5 for the San Timoteo Management Zone).

Table 5. Yucaipa Valley Water District Maximum Benefit Program in Yucaipa and San Timoteo Management Zones - Summary of 2004 Basin Plan Maximum Benefit Commitments, Deliverable Dates and Status of Compliance

Description of Commitment	Compliance Date – as soon as possible, but no later than	Status of Compliance
<p>1. Surface Water Monitoring Program</p> <p>a. Submit Draft Monitoring program to Regional Board</p> <p>b. Implement Monitoring Program</p> <p>c. Quarterly data report submittal</p> <p>d. Annual data report submittal</p>	<p>a. January 23, 2005</p> <p>b. Within 30 days from the date of Regional Board approval of the monitoring plan</p> <p>c. April 15, July 15, October 15, and January 15</p> <p>d. February 15th</p>	<p>a. Draft Monitoring Program submitted to Regional Board on January 23, 2005.</p> <p>b. Monitoring Plan initiated in October 2005.</p> <p>c. All data reports have been submitted on time.</p> <p>d. All annual reports submitted by April 15 of each year. (Prior to the submittal of the first annual report in 2006, Water Board staff agreed to extend the annual report due date to April 15 to allow more time for laboratory analysis of December samples and the subsequent analysis/documentation of results).</p>
<p>2. Groundwater Monitoring Program</p> <p>a. Submit Draft Monitoring program to Regional Board</p> <p>b. Implement Monitoring Program</p> <p>c. Annual data report submittal</p>	<p>a. January 23, 2005</p> <p>b. Within 30 days from the date of Regional Board approval of the monitoring plan</p> <p>c. February 15th</p>	<p>a. Draft Monitoring Program submitted to Regional Board on January 23, 2005.</p> <p>b. Monitoring Plan initiated prior to Regional Board approval.</p> <p>c. All annual reports submitted by April 15 of each year. (Prior to the submittal of the first annual report in 2006, Water Board staff agreed to extend the annual report due date to April 15 to allow more time for laboratory analysis of December samples and the subsequent analysis/documentation of results).</p>
<p>3. Desalter(s) and Brine Disposal Facilities</p> <p>a. Submit plan and schedule for construction of desalter(s) and brine disposal facilities. Facilities are to be operational as soon as possible but no later than 7 years from date of Regional Board approval of plan/schedule.</p> <p>b. Implement the plan and schedule</p>	<p>a. Within 6 months of the either of the following:</p> <p>i. When YVWD's effluent 5-year running average TDS exceeds 530 mg/L; and/or</p> <p>ii. When volume weighted average concentration in the Yucaipa MZ of TDS exceeds 360 mg/L</p>	<p>YVWD has designed and partially completed construction of the Yucaipa Valley Brineline to extend the existing SARI line from San Bernardino to Yucaipa. YVWD has initiated the construction of reverse osmosis facilities to reduce the salinity of recycled water delivered to the Yucaipa, Beaumont and San Timoteo Management Zones. The brineline extension and the reverse osmosis facilities will be fully operational by the end of 2014.</p>

Table 5. Yucaipa Valley Water District Maximum Benefit Program in Yucaipa and San Timoteo Management Zones - Summary of 2004 Basin Plan Maximum Benefit Commitments, Deliverable Dates and Status of Compliance (cont.)

Description of Commitment	Compliance Date – as soon as possible, but no later than	Status of Compliance
<p>4. Non-potable water supply</p> <p>Implement non-potable water supply system to serve water for irrigation purposes. The non-potable supply shall comply with a 10-year running average TDS concentration of 415 mg/L or less</p>	<p>December 23, 2014</p>	<p>On May 12, 2012, the YVWD Board of Directors approved Resolution No. 2012-07 authorizing the implementation of the Regional Strategy to meet Maximum Benefit Commitments. Implementation of the Regional Strategy requires a 10-year running average for TDS for direct delivery of recycled (non-potable) water less than the Maximum Benefit Objective of 330 mg/L in the Beaumont Management Zone, 370 mg/L in the Yucaipa Management Zone and 400 mg/L in the San Timoteo Management Zone. With the completion of the Yucaipa Valley Brineline and desalinization facilities by the end of 2014, YVWD will be capable of reducing salinity within the three management zones.</p>
<p>5. Recycled water recharge</p> <p>The recharge of recycled water in the Yucaipa or San Timoteo Management Zones shall be limited to the amount that can be blended with other recharge sources to achieve a 5-year running average equal to or less than the “maximum benefit” objectives for TDS and nitrate-nitrogen for the relevant Management Zone(s).</p> <p>a. Submit baseline report of amount, locations, and TDS and nitrogen quality of stormwater/imported water recharge.</p> <p>b. Submit documentation of amount, TDS and nitrogen quality of all sources of recharge and recharge locations. For stormwater recharge used for blending, submit documentation that the recharge is the result of YVWD enhanced recharge facilities/programs</p>	<p>Compliance must be achieved by end of 5th year after initiation of recycled water use/recharge operations.</p> <p>a. Prior to initiation of construction of basins/other facilities to support enhanced stormwater/imported water recharge.</p> <p>b. Annually, by January 15th, after initiation construction of facilities/implementation of programs to support enhanced recharge.</p>	<p>Discharge of recycled water has not yet occurred.</p>
<p>6. Ambient groundwater quality determination</p>	<p>July 1, 2005 and every 3 years thereafter</p>	<p>YVWD has participated in the regional ambient water quality determination by providing its share of funding support and by providing groundwater data.</p>

Table 5. Yucaipa Valley Water District Maximum Benefit Program in Yucaipa and San Timoteo Management Zones - Summary of 2004 Basin Plan Maximum Benefit Commitments, Deliverable Dates and Status of Compliance (cont.)

Description of Commitment	Compliance Date – as soon as possible, but no later than	Status of Compliance
7. Replace denitrification facilities (necessary to comply with TIN wasteload allocation specified in Table 5-5)	New facilities shall be operational no later than December 23, 2007	YVWD has completed the construction of denitrification facilities in 2008
8. YVWD recycled water quality improvement plan and schedule a. Submit plan and schedule b. Implement plan and schedule	a. 60 days after the TDS 12-month running average effluent quality equals or exceeds 530 mg/L for 3 consecutive months and/or the 12-month running average TIN concentration equals or exceeds 6 mg/L in any month (once replacement denitrification facilities are in place) b. Upon approval by Regional Board	Conditions requiring action have not been triggered.
9. Remove/reduce the discharge of YVWD effluent from the unlined portion of San Timoteo Creek a. Submit proposed plan/schedule b. Implement plan/schedule	a. June 23, 2005 b. Upon Regional Board approval	YVWD submitted a plan on May 2, 2011 to ensure that the effluent discharged to San Timoteo Creek will meet the 400 mg/L TDS objective for San Timoteo Management Zone when the reverse osmosis system and brineline are operational in 2014.
10. Construct the Western Regional Interceptor for Dunlap Acres a. Submit proposed construction plan and schedule. The schedule shall assure the completion of construction as soon as possible but no later than January 1, 2010. b. Implement plan and schedule	a. June 23, 2005 b. Upon Regional Board approval	In 2008, YVWD completed construction of the Western Regional Interceptor. Several additional sewer collection system main-lines have been installed in the area in an effort to eliminate the use of septic systems. YVWD plans to install an additional 6,300 feet of sewer collection system infrastructure during fiscal year 2012-13.

8.3.2 Proposed Changes to the YVWD Maximum Benefit Commitments for the Yucaipa Management Zones

As YVWD is the only agency responsible for the Yucaipa Management Zone commitments, staff propose to identify YVWD's commitments for the Yucaipa Management Zone in a separate table and discussion in the Basin Plan. Similarly, YVWD's commitments in the San Timoteo Management Zone will be addressed separately.

The fundamental approach to meeting the maximum benefit commitments as reflected in the Regional Strategy is to ensure that underlying groundwater maximum benefit objectives are met through blending or desalting. To assure that water quality consistent with maximum benefit will be maintained in the Yucaipa Management Zone, staff propose to modify the language for YVWD commitments #1, #2, #3, #4, and #8 shown in Table 5-9a of the Basin Plan. Details of the proposed modifications are discussed below. In addition, as reflected in Table 5, Commitments #7 (Replace Denitrification Facilities), #9 (Remove/reduce effluent from San Timoteo Creek and #10 (Construct Western Regional Interceptor for Dunlap Acres) have all been completed and staff propose to delete these requirements.

The proposed deletion of construction of denitrification facilities requirement, removing/reducing effluent from San Timoteo Creek requirement and construction of the Western Regional Interceptor for Dunlap Acres requirement is shown in the Attachment to Resolution No. R8-2014-0005, Chapter 5, Implementation, Section VI.B.1. Yucaipa Maximum Benefit Program requirements.

Commitment #1 – Surface Water Monitoring Program

As noted above, one of the Maximum Benefit Program commitments made by YVWD and included in the Basin Plan is to implement a surface water monitoring program. The purpose of the surface water monitoring program is to evaluate the water quality effects of implementation of the "maximum benefit" nitrate-nitrogen and TDS objectives on San Timoteo Creek and downstream Santa Ana River water quality and to ensure that poor quality water is not being delivered downstream to the Bunker Hill B Management Zone¹⁴.

The 2004 Basin Plan Amendment required that a draft surface water monitoring program be submitted by January 23, 2005 and implemented within 30 days of Regional Board approval of the proposal. These requirements have been fulfilled.

To provide direction to the development of the draft program, specific surface water monitoring requirements, including monitoring locations and sampling frequencies, are explicitly identified in the Basin Plan (Table 5-9b). These specific requirements cannot be modified without an additional Basin Plan amendment. Based on experience gained from

¹⁴ Staff proposes that the discharges from YVWD and the City of Beaumont should no longer be regulated pursuant to the existing Basin Plan WLA. Evidence indicates that these discharges reach the Santa Ana River or the Bunker Hill Management Zone only in periods of extreme rainfall and do not significantly impact the quality of either waterbody. Despite these findings, staff believes that it is appropriate to continue the surface water monitoring program to allow for long-term tracking of surface water quality and quantity.

implementing the approved program, YVWD has determined that modifications to the program would be appropriate and has requested that the Basin Plan be amended to delete Table 5-9b. This change would provide greater flexibility for future appropriate modifications of the surface water monitoring program by the Regional Board without the need for a Basin Plan amendment.

The proposed amendments to the surface water monitoring requirements also explicitly recognize that further modification of the surface water monitoring program may be appropriate in the future. The proposed amendments specify that YVWD must submit a proposed revised monitoring program when directed to do so by the Regional Board's Executive Officer and in accordance with the schedule prescribed by the Executive Officer. Of course, provided that Table 5-9b is removed and that the Basin Plan no longer dictates monitoring specifics, YVWD may independently request review and Regional Board approval of a revised surface water monitoring program as the need arises.

YVWD has also requested modifications to the reporting schedule, including deletion of the quarterly reporting requirements and extension of the deadline for the annual monitoring report from February 15th to April 15th of each year to allow more time for laboratory analysis and processing of monitoring data collected in December. Regional Water Board staff supports these revisions. (In fact, as indicated in Table 5, Board staff is supportive of the requested change in the annual report due date to April 15th, given that the change would allow for more complete data and analyses.)

The proposed changes to the surface water monitoring requirements would not establish new regulations. Rather, the changes would merely improve the efficiency and effectiveness of already-required monitoring programs.

The proposed changes to the Yucaipa Management Zone Maximum Benefit Program surface water monitoring program are shown in the Attachment to Resolution No. R8-2014-0005, Chapter 5, Implementation, Section VI.B.1. Yucaipa Maximum Benefit Program requirements, including: requiring the submittal of a revised surface water monitoring program within 30 days of the approval of the Basin Plan amendment and, thereafter, as directed by the Regional Board's Executive Officer; requiring implementation of the revised monitoring program(s) upon Regional Board approval; eliminating the quarterly monitoring reporting requirement; changing the deadline of the annual monitoring report to April 15th; update of Table 5-9a; and deletion of Table 5-9b.

Commitment #2 – Groundwater Monitoring Program

In addition to the surface water monitoring program commitments, the Maximum Benefit Program commitments made by YVWD that are now specified in the Basin Plan also include a groundwater monitoring program component. In conjunction with surface water monitoring, the purpose of the groundwater monitoring program is to evaluate the water quality effects of implementation of the "maximum benefit" nitrate-nitrogen and TDS objectives on underlying and downstream groundwater quality.

The 2004 Basin Plan Amendment required that a draft groundwater monitoring program be submitted by January 23, 2005 and implemented within 30 days of Regional Board approval of the proposal. These requirements have been fulfilled.

The proposed amendments to the groundwater monitoring requirements recognize that modifications of the groundwater monitoring program are likely to be needed in the future. The proposed amendments specify that YVWD must submit a proposed revised groundwater monitoring program in the future when directed by the Executive Officer.

Again, as with the surface water monitoring program revised pursuant to the recommended amendments described above, YVWD could also independently request review and Regional Board approval of a revised groundwater monitoring program as the need arises.

The proposed changes to the groundwater monitoring requirements would not result in new regulations. Rather, the changes would merely improve the efficiency and effectiveness of established monitoring requirements.

The proposed changes to the Yucaipa Management Zone Maximum Benefit Program groundwater monitoring program are shown in the Attachment to Resolution No. R8-2014-0005, Chapter 5, Implementation, Section VI.B.1. Yucaipa Maximum Benefit Program requirements, including: requiring the submittal of a revised groundwater monitoring program every three years in conjunction with the ambient quality determination or, as directed by the Regional Board's Executive Officer; requiring implementation of the revised monitoring program(s) upon Regional Board approval; changing the deadline of the annual monitoring report to April 15th; and, update of Table 5-9a.

Commitment #3 – Desalter(s) and Brine Disposal Facilities

YVWD has designed and is in the process of completing construction of the desalter and brineline. Therefore, the first trigger for the submittal of a plan and schedule to construct desalter(s) and brine disposal facilities (Table 5, 3.a.i., above) is no longer needed. The second trigger – when the volume weighted average TDS concentration in the Yucaipa Management Zone exceeds 360 mg/L, is also no longer necessary since YVWD has planned the operation of desalting facilities and/or blending to ensure that recycled water meets objectives.

The proposed changes to the Yucaipa Management Zone Maximum Benefit Program desalter/brine disposal are shown in the Attachment to Resolution No. R8-2014-0005, Chapter 5, Implementation, Section VI.B.1. Yucaipa Maximum Benefit Program requirements.

Commitment #4 – Non-potable water supply

Staff proposes to update the TDS requirements for non-potable water supplies for the Yucaipa Management Zone. YVWD will produce a non-potable supply that may include recycled water, un-treated imported water and/or stormwater. The non-potable supply used in the Yucaipa Management Zone will be required to meet a 10-year running average TDS concentration of 370 mg/L. To meet this requirement, YVWD will blend the recycled water with other sources and/or desalt the recycled water. If YVWD plans on providing recycled water for non-irrigation direct reuse, then the effluent quality must meet a 10-year

running average concentration of 6.7 mg/L (taking into consideration the nitrogen loss coefficient).

The proposed changes to the Yucaipa Management Zone Maximum Benefit Program non-potable system requirements are shown in the Attachment to Resolution No. R8-2014-0005, Chapter 5, Implementation, Section VI.B.1. Yucaipa Maximum Benefit Program requirements.

Commitment # 8 – YVWD Recycled Water Quality Improvement Plan and Schedule

The existing Basin Plan requires YVWD to develop and submit a Recycled Water Quality Improvement Plan once the 12-month running average TDS effluent quality reaches 530 mg/L for 3 consecutive months. This trigger is currently based upon the WLA now specified in the Basin Plan for YVWD of 540 mg/L. The wasteload allocations for TDS (and TIN discharges) that are specified in the Basin Plan were developed to address the effects of discharges on the Santa Ana River and underlying groundwater. However, as indicated above (see footnote 14), the best available evidence demonstrates that the YVWD discharges do not reach the Santa Ana River, apart from extreme wet weather events, and thus have no appreciable effect on River or underlying groundwater quality. Therefore, applying the wasteload allocation assigned to YVWD is inappropriate. The scientifically defensible approach is to apply TDS limits that assure protection of the groundwater management zones affected by the discharges.¹⁵ Accordingly, the proposed amendments require that YVWD discharges meet the objectives for the Yucaipa Management Zone, a requirement anticipated by the Regional Strategy. As such, there is no longer the need for the recycled water improvement plan envisioned in the 2004 Basin Plan.

The proposed deletion of the recycled water quality improvement plan requirements is shown in the Attachment to Resolution No. R8-2014-0005, Chapter 5, Implementation, Section VI.B.1. Yucaipa Maximum Benefit Program requirements.

8.4 Modification of the Beaumont Management Zone Maximum Benefit Programs

The 2004 Basin Plan specified a maximum benefit program for the Beaumont Management Zone and assigned responsibility for that program to the City of Beaumont and STWMA. Changes to that program are needed to reflect the dissolution of STWMA and new responsible parties and respective assigned responsibilities. Further, consistent with the proposed changes to the Yucaipa Management Zone, modifications to the maximum benefit program for the Beaumont Management Zone that are impacted by discharges from the cities of Banning and Beaumont need to be updated. The cities of Beaumont and Banning, BCVWD, YVWD and the San Geronio Pass Water Agency, whose jurisdictions overlie the Beaumont Management Zone, are the principal agencies responsible for implementing the maximum benefit programs in this area.

¹⁵ As noted above, work to revise the TDS and TIN wasteload allocations is underway and the revised allocations will be presented for formal approval as an amendment to the Basin Plan.

8.4.1 Compliance Status of the STWMA/City of Beaumont Maximum Benefit Commitments in the Beaumont and Upper Portion of the San Timoteo Management Zones

The current status of the implementation of the City of Beaumont/STWMA maximum benefit program incorporated into the Basin Plan in 2004 is discussed below. Proposed modifications to this program are discussed in Section 8.4.2.

Table 5-10a of the Basin Plan identifies the projects and requirements (the “maximum benefit commitments”) that must be implemented by STWMA and the City of Beaumont to demonstrate that water quality consistent with the maximum benefit to the people of the state will be maintained. Table 6 below provides a summary of each commitment specified in the Basin Plan and the status of compliance with those requirements.

Upon the dissolution of STWMA, the maximum benefit commitments became the responsibility of the City of Beaumont and the remaining individual agencies that had formed STWMA, *i.e.*, – BCVWD and YVWD¹⁶. As can be seen in Table 6, the City of Beaumont has demonstrated that most of the maximum benefit commitments for the Beaumont Management Zone and the northern portion of the San Timoteo Management Zone have been met. The commitments that have not been met are to develop a workable plan to transfer recycled water to BCVWD for non-potable use, and to develop a revised proposal to mitigate salt loading in exceedance of the TDS objective for the San Timoteo Management Zone¹⁷.

¹⁶ South Mesa Water Company, an STWMA original member, was not identified in the Basin Plan as responsible for implementation of the maximum benefit program commitments.

¹⁷ See Section 8.5 for discussion of the proposed amendments to the San Timoteo Management Zone maximum benefit program.

Table 6. STWMA and the City of Beaumont Maximum Benefit Program in Beaumont and the San Timoteo Management Zones - Summary of 2004 Basin Plan Maximum Benefit Commitments, Deliverable Dates and Status of Compliance

Description of Commitment	Compliance Date – as soon as possible, but no later than	Status of Compliance
<p>1. Surface Water Monitoring Program</p> <p>a. Submit Draft Monitoring program to Regional Board</p> <p>b. Implement Monitoring Program</p> <p>c. Quarterly data report submittal</p> <p>d. Annual data report submittal</p>	<p>a. January 23, 2005</p> <p>b. Within 30 days from the date of Regional Board approval of the monitoring plan</p> <p>c. April 15, July 15, October 15, and January 15</p> <p>d. February 15th</p>	<p>a. Draft Monitoring Program submitted to Regional Board on January 23, 2005.</p> <p>b. Monitoring Plan initiated in October 2005.</p> <p>c. All data reports have been submitted on time.</p> <p>d. All annual reports submitted by April 15 of each year. (Prior to the submittal of the first annual report in 2006, Water Board staff agreed to extend the annual report due date to April 15 to allow more time for laboratory analysis of December samples and the subsequent analysis/documentation of results).</p>
<p>2. Groundwater Monitoring Program</p> <p>a. Submit Draft Monitoring program to Regional Board</p> <p>b. Implement Monitoring Program</p> <p>c. Annual data report submittal</p>	<p>a. January 23, 2005</p> <p>b. Within 30 days from the date of Regional Board approval of the monitoring plan</p> <p>c. February 15th</p>	<p>a. Draft Monitoring Program submitted to Regional Board on January 23, 2005</p> <p>b. Monitoring Plan initiated in October 2005.</p> <p>c. All annual reports submitted by April 15 of each year. (Prior to the submittal of the first annual report in 2006, Water Board staff agreed to extend the annual report due date to April 15 to allow more time for laboratory analysis of December samples and the subsequent analysis/documentation of results).</p>
<p>3. Desalter(s) and Brine Disposal Facilities</p> <p>a. Submit plan and schedule for construction of desalter(s) and brine disposal facilities. Facilities are to be operational as soon as possible but no later than 7 years from date of Regional Board approval of plan/schedule.</p> <p>b. Implement the plan and schedule</p>	<p>a. Within 6 months of the either of the following:</p> <p>i. When Beaumont's effluent 5-year running average TDS exceeds 480 mg/L; and/or</p> <p>ii. When volume weighted average concentration in the Beaumont MZ of TDS exceeds 320 mg/L</p>	<p>The conditions for desalting have not been triggered. Beaumont's effluent TDS average for CY 2011 is 408 mg/L. The 2009 ambient TDS quality for Beaumont MZ is 280 mg/L.</p>

Table 6. STWMA and the City of Beaumont Maximum Benefit Program in Beaumont and San Timoteo Management Zones - Summary of 2004 Basin Plan Maximum Benefit Commitments, Deliverable Dates and Status of Compliance (cont).

Description of Commitment	Compliance Date – as soon as possible, but no later than	Status of Compliance
<p>4. Non-potable water supply</p> <p>Implement non-potable water supply system to serve water for irrigation purposes. The non-potable supply shall comply with a 10-year running average TDS concentration of 390 mg/L or less</p>	<p>December 23, 2014</p>	<p>Non-potable water supply system and plan are still in development. The City has been working with BCVWD to develop a plan to deliver the City's recycled water to BCVWD to meet non-potable demands. These discussions have stalled but may be restarting soon. Water Board staff is now trying to facilitate the negotiation process. BCVWD has nearly completed the construction of their non-potable supply system – the major missing portion of the system is the intertie with the City at the City's wastewater plant.</p>
<p>5. Recycled water recharge</p> <p>The recharge of recycled water in the Beaumont or San Timoteo Management Zones shall be limited to the amount that can be blended with other recharge sources to achieve a 5-year running average equal to or less than the "maximum benefit" objectives for TDS and nitrate-nitrogen for the relevant Management Zone(s).</p> <p>a. Submit baseline report of amount, locations, and TDS and nitrogen quality of stormwater/imported water recharge.</p> <p>b. Submit documentation of amount, TDS and nitrogen quality of all sources of recharge and recharge locations. For stormwater recharge used for blending, submit documentation that the recharge is the result of YVWD enhanced recharge facilities/programs</p>	<p>Compliance must be achieved by end of 5th year after initiation of recycled water use/recharge operations.</p> <p>a. Prior to initiation of construction of basins/other facilities to support enhanced stormwater/imported water recharge.</p> <p>b. Annually, by January 15th, after initiation construction of facilities/implementation of programs to support enhanced recharge.</p>	<p>a. The City has constructed stormwater recharge basins in conjunction with new residential development within City limits. The Beaumont Basin Watermaster is developing a methodology to compute "baseline" and "new" stormwater recharge. Once the Watermaster has adopted an official policy, the City will prepare an analysis to document baseline stormwater recharge quantities. No water quality data prior to the start of maximum benefit monitoring exists.</p> <p>b. The City is currently reporting on the volume and quality of all recycled water and imported water recharge activities in the BMZ. The City will augment this information with stormwater volume and quality once the Watermaster has adopted an official policy and the City has prepared an analysis to document baseline and "new" stormwater recharge quantities.</p>
<p>6. Ambient groundwater quality determination</p>	<p>July 1, 2005 and every 3 years thereafter</p>	<p>The City has participated in the regional ambient water quality determination by providing its share of funding support and by providing groundwater data.</p>

Description of Commitment	Compliance Date – as soon as possible, but no later than	Status of Compliance
7. Replace denitrification facilities (necessary to comply with TIN wasteload allocation specified in Table 5-5)	Compliance with 6 mg/L TIN limitation to be achieved by December 23, 2007	Denitrification facilities were completed by January 2007. The Beaumont Wastewater Treatment Plant is in compliance with the 6 mg/L TIN limitation.
8. the City of Beaumont recycled water quality improvement plan and schedule a. Submit plan and schedule b. Implement plan and schedule	a. 60 days after the TDS 12-month running average effluent quality equals or exceeds 480 mg/L for 3 consecutive months and/or the 12-month running average TIN concentration equals or exceeds 6 mg/L in any month (once replacement denitrification facilities are in place) b. Upon approval by Regional Board	Conditions triggering action have not been met.
9. Remove/reduce the discharge of Beaumont effluent from the unlined portion of San Timoteo Creek a. Submit proposed plan/schedule b. Implement plan/schedule	a. June 23, 2005 b. Upon Regional Board approval	Per the requirement of the U.S. Fish and Wildlife Service, the City is required to leave a minimum of 1.8 mgd in the unlined portion of San Timoteo Creek (letter dated February 29, 2008). a. In 2009, the Regional Board approved two new points of discharge for the City's recycled water effluent in the BMZ to help the City reduce flow to the unlined portion of San Timoteo Creek while plans for the non-potable water system were developed. The City began discharging at the first of these two points (DP-007) in March of 2010. The City has also submitted proposals to the Regional Board to mitigate salt loading in exceedance of the STMZ TDS objectives for the 1.8 mgd of discharge. The most recent mitigation plan was not approved by the Regional Board. A revised proposal from the City has not been received b. Pending approval by the Regional Board.

8.4.2 Proposed Changes to the Maximum Benefit Program for the Beaumont Management Zone

In order to update the Beaumont Management Zone Maximum Benefit Program to reflect new responsible agencies and specific revisions to the commitments, staff propose modification of the overall description of the Maximum Benefit Program. A new table is proposed to summarize these commitments. Staff also propose to add new commitments (#4 and #5) and to modify the language for existing commitments #1, #2, #3, #4 and #8. Details of the proposed modifications are discussed below.

The recommended revisions reflect agency commitments to implement the Regional Strategy, described above, which specifies an approach for the Beaumont Management Zone that is consistent with the Yucaipa Management Zone maximum benefit program. This Strategy will ensure that the Beaumont maximum benefit objectives are met through blending or desalting while promoting recycled water reuse.

Two key changes affect the overall maximum benefit commitments described below: the change to the responsible parties, and the application of the TDS and nitrogen wasteload allocations to surface water discharges by the City of Beaumont. These key changes are discussed first.

Delete Reference to STWMA in the Basin Plan; add YVWD, BCVWD, the City of Banning and the San Geronio Pass Water Agency as responsible agencies for the Maximum Benefit Commitments in the Beaumont Management Zone

As discussed previously, a number of water resource management changes have taken place that warrant changes to the maximum benefit program specified in the Basin Plan for the Beaumont Management Zone. First, the agencies that made the original maximum benefit commitments have changed and additional agencies have expressed interest in participating in the maximum benefit program in the Beaumont Management Zone. The original maximum benefit commitments were made by the City of Beaumont and STWMA members. STWMA was dissolved in 2010, but the member agencies (YVWD, the City of Beaumont, and BCVWD) remain. In addition, the City of Banning has planned recycled water projects in the Beaumont Management Zone. The impacts of these projects on Beaumont Management Zone must be taken into account. Further, the San Geronio Pass Agency (Pass Agency) has water management responsibilities in the Beaumont Management Zone and the Pass Agency representatives believe that it would be appropriate for the Agency to be a part of the maximum benefit program. Consequently, YVWD, BCVWD, the City of Banning and the Pass Agency jointly submitted and subsequently approved the Regional Strategy which in part includes the continuation of the commitments specified in Table 5-10a; the City of Beaumont also formally approved the Regional Strategy (see discussion in Section 8.1, Beaumont Management Zone). Therefore, staff propose to delete reference to STWMA in the Basin Plan and add YVWD, BCVWD, the City of Banning and the Pass Water Agency to the City of Beaumont as the agencies that are responsible for the maximum benefit commitments in the Beaumont Management Zone.

The proposed changes to the Beaumont Maximum Benefit Program responsible agencies are shown in the Attachment to Resolution No. R8-2014-0005, Chapter 5, Implementation, Section VI.B.3. Beaumont Maximum Benefit Program requirements.

Delete the TDS and Nitrogen Waste Load Allocation WLA for the City of Beaumont Wastewater Treatment Plant

The second recommended change pertains to the applicability of the wasteload allocations for the discharge of effluent from the wastewater treatment facilities operated by the City of Beaumont in the Beaumont Management Zone. Currently Beaumont discharges the recycled water at three discharge points, DP#001, DP#007, and DP#008. Discharges at DP#001 flow into Coopers Creek, which drains into San Timoteo Creek and recharges the San Timoteo Management Zone. The effluent at DP#007 and DP#008 never leaves the Beaumont Management Zone. While the Beaumont recycled water discharge is currently regulated as a surface water discharge pursuant to the Basin Plan wasteload allocations (WLAs) that are shown in Tables 5-xx and 5-yy of the Basin Plan, the best available evidence indicates that the impact of the discharge is on the underlying Beaumont and San Timoteo Management Zones, not the Santa Ana River. Since the surface water WLAs are thus not appropriate for these discharges, the allocations should be deleted from Tables 5-5. (As noted previously, the wasteload allocations for TDS and nitrogen as a whole are under review and a Basin Plan amendment will be proposed in the near future to make appropriate modifications. However, the evidence is now clear that the Beaumont discharges should not be regulated pursuant to the wasteload allocations, and that those allocations should be deleted without further delay.) Rather, the effluent limits for Beaumont should be based on the underlying management zone water quality objectives. Compliance with those effluent limits would be measured at the point of discharge, or in the underlying management zone *i.e.*, the recharge of recycled water shall be limited to the amount that can be blended with other recharge sources to achieve a 10yr running-average equal to or less than the maximum-benefit objectives for TDS and nitrate-nitrogen in the relevant management zones.

The proposed deletion of the TDS and total inorganic nitrogen wasteload allocation for the City of Beaumont recycled water discharge is shown in the Attachment to Resolution No. R8-2014-0005, Chapter 5, Implementation, Section III.B.4, TDS and Nitrogen Wasteload Allocation

Commitment #1 – Surface Water Monitoring Program

As noted above, one of the Maximum Benefit Program commitments made by the City of Beaumont and STWMA and included in the current Basin Plan is to implement a surface water monitoring program. The purpose of the surface water monitoring program is to evaluate the water quality effects of implementation of the “maximum benefit” nitrate-nitrogen and TDS objectives on Noble and Little San Gorgonio Creeks and underlying Beaumont Management Zone water quality.

The 2004 Basin Plan required that a draft surface water monitoring program be submitted by January 23, 2005 and implemented within 30 days of Regional Board approval of the proposal. These requirements have been fulfilled.

To provide direction to the development of the draft program, specific surface water monitoring requirements, including monitoring locations and sampling frequencies, are explicitly identified in the Basin Plan (Table 5-10b). These specific requirements cannot be modified without an additional Basin Plan amendment. Based on experience gained from implementing the approved program, the City of Beaumont, YVWD, BCVWD, the City of Banning and the Pass Agency have determined that modifications to the program would be appropriate and have requested that the Basin Plan be amended to delete Table 5-10b. This would provide greater flexibility for future modifications of the surface water monitoring program without the need for a Basin Plan amendment. The proposed amendments to the surface water monitoring requirements also recognize that further modification of the surface water monitoring program may be appropriate in the future. The proposed amendments specify that the City of Beaumont, YVWD, BCVWD, the City of Banning and the Pass Agency must submit a proposed revised monitoring program when directed to do so by the Regional Board's Executive Officer and in accordance with the schedule prescribed by the Executive Officer. Of course, provided that Table 5-10b is removed and that the Basin Plan no longer dictates monitoring specifics, the City of Beaumont, YVWD, BCVWD, the City of Banning and the Pass Agency may independently request review and Regional Board approval of a revised surface water monitoring program as the need arises.

The City of Beaumont has also requested modifications to the reporting schedule, including deletion of the quarterly reporting requirements and extension of the deadline for the annual monitoring report from February 15th to April 15th of each year to allow more time for laboratory analysis and processing of monitoring data collected in December. Regional Water Board staff supports these revisions.

The proposed changes to the surface water monitoring requirements would not result in new regulations. Rather, the changes would merely improve the efficiency and effectiveness of established monitoring requirements.

The proposed changes to the Beaumont Maximum Benefit Program surface water monitoring program are shown in the Attachment to Resolution No. R8-2014-0005, Chapter 5, Implementation, Section VI.B.3. Beaumont Maximum Benefit Program requirements, including: requiring the submittal of a revised surface water monitoring program within 30 days of the approval of the Basin Plan amendment and, thereafter, as directed by the Regional Board's Executive Officer; requiring implementation of the revised monitoring program(s) upon Regional Board approval; eliminating the quarterly monitoring reporting requirement; extending the deadline of the annual monitoring report to April 15th; update of Table 5-10a; and deletion of Table 5-10b.

Commitment #2 – Groundwater Monitoring Program

In addition to the surface water monitoring program commitments, the Maximum Benefit Program commitments made by the City of Beaumont/STWMA and specified in the Basin Plan also include a groundwater monitoring program component. In conjunction with surface water monitoring, the purpose of the groundwater monitoring program is to evaluate the water quality effects of implementation of the "maximum benefit" nitrate-nitrogen and TDS objectives on underlying and downgradient groundwater quality.

The 2004 Basin Plan required that a draft groundwater monitoring program be submitted by January 23, 2005 and implemented within 30 days of Regional Board approval of the proposal. These requirements have been fulfilled.

The proposed amendments to the groundwater monitoring requirements recognize that modifications of the groundwater monitoring program may be needed in the future. The proposed amendments specify that the City of Beaumont, YVWD, BCVWD, the City of Banning and the Pass Agency must submit a proposed revised groundwater monitoring program in the future when directed by the Executive Officer. Once again, the City of Beaumont, YVWD, BCVWD, the City of Banning and San Geronio Pass Water Agency may independently request review and Regional Board approval of a revised groundwater monitoring program as the need arises.

The proposed changes to the groundwater monitoring requirements would not establish new regulations. Rather, the changes would merely improve the efficiency and effectiveness of established monitoring requirements.

The proposed changes to the Beaumont Management Zone Maximum Benefit Program groundwater monitoring program are shown in the Attachment to Resolution No. R8-2014-0005, Chapter 5, Implementation, Section VI.B.3. Beaumont Maximum Benefit Program requirements, including: requiring the submittal of a revised groundwater monitoring program within and every three years in conjunction with the ambient quality determination or, thereafter, as directed by the Regional Board's Executive Officer; requiring implementation of the revised monitoring program(s) upon Regional Board approval; extending the deadline of the annual monitoring report to April 15th; and update of Table 5-10a.

Commitment #3, #4 and #5 – Desalter(s) and Brine Disposal Facilities

In order to implement the proposed Regional Strategy, which calls for desalter and brine disposal commitments in the Beaumont Management Zone, staff recommends that the desalter/brine disposal requirements now in the Basin Plan be updated. As proposed, the YVWD desalting requirement is updated to reflect the current status of YVWD's desalter construction and operation. Desalting provisions are also added for the City of Beaumont and Banning to require that specific planning for desalter and brine disposal facilities begin as soon as possible after the Basin Plan is amended.

The proposed changes to the Beaumont Management Zone Maximum Benefit Program desalter/brine disposal requirements are shown in the Attachment to Resolution No. R8-2014-0005, Chapter 5, Implementation, Section VI.B.3. Beaumont Maximum Benefit Program requirements.

Commitment #4 – Non-potable water supply (previously identified as Commitment #4, now identified as Commitment #6)

Per the proposed Regional Strategy, staff also proposes to update the TDS requirements for non-potable water supplies for the Beaumont Management Zone and the reuse of recycled water by the City of Beaumont, YVWD and/or the City of Banning. These requirements require the TDS of recycled water used in the non-potable system to meet the Beaumont Management Zone 330 mg/L TDS water quality objective as a 10-year

running average. Meeting the Beaumont Management Zone maximum benefit objective can be accomplished via blending, desalting or combination of both.

The proposed changes to the Beaumont Management Zone Maximum Benefit Program non-potable system requirements are shown in the Attachment to Resolution No. R8-2014-0005, Chapter 5, Implementation, Section VI.B.3. Beaumont Maximum Benefit Program requirements.

Commitment #7 – Replace Denitrification Facilities

As reflected in Table 6, Commitments #7 (Replace Denitrification Facilities), has been completed and staff propose to delete these requirements.

The proposed deletion of construction of denitrification facilities requirement is shown in the Attachment to Resolution No. R8-2014-0005, Chapter 5, Implementation, Section VI.B.3. Beaumont Maximum Benefit Program requirements.

Commitment #8 – the City of Beaumont recycled water quality improvement plan and schedule

The 2004 Basin Plan required the City of Beaumont to develop and submit a recycled water quality improvement plan once the TDS 12-month running average effluent quality reaches 480 mg/L for 3 consecutive months or the TIN effluent quality equals or exceeds 6 mg/L in any month after denitrification facilities, if needed, are in place. These triggers are based upon the WLAs specified for the City of Beaumont of 490 mg/L for TDS and 6.0 mg/L for TIN. The wasteload allocations for TDS (and TIN discharges) that are specified in the Basin Plan were developed to address the effects of discharges on the Santa Ana River and underlying groundwater. However, as indicated above, the best available evidence demonstrates that discharges from the City do not reach the Santa Ana River, apart from extreme wet weather events, and thus have no appreciable effect on River or underlying groundwater quality. Therefore, as discussed above, applying the wasteload allocation assigned to the City of Beaumont is inappropriate and deletion of these allocations is recommended as part of these amendments. The scientifically defensible approach is to apply TDS limits that assure protection of the groundwater management zones affected by the discharges. Accordingly, the proposed amendments require that the all wastewater discharges meet the objectives for the Beaumont Management Zone. This requirement is anticipated by the Regional Strategy adopted by YVWD, Beaumont and other parties, as described previously. As such, there is no longer the need for the recycled water improvement plan envisioned in the 2004 Basin Plan

The proposed deletion of the recycled water quality improvement plan requirements is shown in the Attachment to Resolution No. R8-2014-0005, Chapter 5, Implementation, Section VI.B.3. Beaumont Maximum Benefit Program requirements.

8.5 Modification of the San Timoteo Management Zone Maximum Benefit Programs

The 2004 Basin Plan specified a maximum benefit program for the San Timoteo Management Zone that was combined with both the Yucaipa and Beaumont Management Zone maximum benefit programs. As part of the Yucaipa and San Timoteo Management Zone maximum benefit program, YVWD had the responsibility for implementing the commitments in the Yucaipa Management Zone and within their jurisdiction in the lower portion of the San Timoteo Management Zone. As part of the Beaumont and San Timoteo Management Zone maximum benefit program, the City of Beaumont and STWMA – both with jurisdiction in the upper portion of the San Timoteo Management Zone, were responsible for meeting the commitments in both the Beaumont Management Zone and the upper portion of the San Timoteo Management Zone. The current status of the implementation of the YVWD and the City of Beaumont/STWMA maximum benefit program in the San Timoteo Management Zone included 2004 Basin Plan was discussed in Sections 8.3 and 8.4, respectively and summarized in Tables 5 and 6.

In order to clearly identify what maximum benefit programs need to be implemented in the San Timoteo Management Zone and assign appropriate responsibility, staff propose to include separate Basin Plan narrative and summary table. The proposed commitments are summarized below (and for the most part are consistent with the commitments specified for the Yucaipa and Beaumont Management Zones). The fundamental approach to meeting the maximum benefit commitments for the San Timoteo Management Zone is also reflected in the Regional Strategy and will ensure that underlying groundwater maximum benefit objectives are met.

Once again, there are two key changes that affect the maximum benefit program for the San Timoteo Management Zone and the Basin Plan changes required. First, it is necessary to reflect the dissolution of STWMA and the assignment of the maximum benefit commitments to YVWD and the City of Beaumont. As discussed previously, both of these agencies have waste discharges to the San Timoteo Management Zone. Second, the deletion of the TDS and nitrogen wasteload allocations (WLAs) for both YVWD and the City of Beaumont as recommended above, necessitates changes in the certain commitments. These changes are presented and described below.

The proposed deletion of the TDS and total inorganic nitrogen wasteload allocation for the City of Beaumont and YVWD recycled water discharges is shown in the Attachment to Resolution No. R8-2014-0005, Chapter 5, Implementation, Section III.B.4, TDS and Nitrogen Wasteload Allocation

8.5.1 Proposed San Timoteo Management Zone Commitments

Commitment #1 – Surface Water Monitoring Program

Consistent with the Yucaipa and Beaumont Management Zone maximum benefit programs, staff propose that YVWD and the City of Beaumont implement a surface water monitoring program. The purpose of the surface water monitoring program is to evaluate the water quality effects of implementation of the “maximum benefit” nitrate-nitrogen and TDS objectives on San Timoteo Creek and downstream surface and groundwaters.

The proposed addition of the surface water monitoring requirements also explicitly recognize that further modification of the surface water monitoring program may be appropriate in the future. The proposed amendments specify that YVWD and the City of Beaumont must submit a proposed revised monitoring program when directed to do so by the Regional Board's Executive Officer and in accordance with the schedule prescribed by the Executive Officer. These agencies may independently request review and Regional Board approval of a revised surface water monitoring program as the need arises.

The proposed changes to the surface water monitoring requirements would not result in new regulations. Rather, the changes would merely improve the efficiency and effectiveness of established monitoring requirements.

The proposed San Timoteo monitoring program requirement is shown in the Attachment to Resolution No. R8-2014-0005, Chapter 5, Implementation, Section VI.B.2. San Timoteo Maximum Benefit Program requirement and includes: requiring the submittal of a surface water monitoring program within 30 days of the approval of the Basin Plan amendment and, thereafter, as directed by the Regional Board's Executive Officer; requiring implementation of the monitoring program(s) upon Regional Board approval and submittal of an annual report.

Commitment #2 – Groundwater Monitoring Program

In addition to the surface water monitoring program commitments, staff also propose to add groundwater monitoring program requirements for the San Timoteo Management Zone. In conjunction with surface water monitoring, the purpose of the groundwater monitoring program is to evaluate the water quality effects of implementation of the "maximum benefit" nitrate-nitrogen and TDS objectives on underlying and downstream groundwater quality.

Currently both YVWD and the City of Beaumont are implementing a Regional Board approved groundwater monitoring program pursuant to the 2004 amendments (see Sections 8.3 and 8.4). It is expected that these agencies will continue this monitoring program.

The proposed amendments also recognize that modifications of the groundwater monitoring program may be likely to be needed in the future. The proposed amendments specify that YVWD and the City of Beaumont must submit a proposed revised groundwater monitoring program in the future when directed by the Executive Officer.

Again, as with the surface water monitoring program revised pursuant to the recommended amendments described above, YVWD and the City of Beaumont could also independently request review and Regional Board approval of a revised groundwater monitoring program as the need arises.

The proposed changes to the groundwater monitoring requirements would not result in new regulations. Rather, the changes would merely improve the efficiency and effectiveness of established monitoring requirements.

The proposed San Timoteo Management Zone Maximum Benefit Program groundwater monitoring program is shown in the Attachment to Resolution No. R8-2014-0005, Chapter 5, Implementation, Section VI.B.2. San Timoteo Maximum Benefit Program requirements, including: requiring the submittal of a revised groundwater monitoring program every three years in conjunction with the ambient quality determination or as directed by the Regional Board's Executive Officer; requiring implementation of the revised monitoring program(s) upon Regional Board approval and submittal of an annual report.

Commitment #3, and #4 – Desalter(s) and Brine Disposal Facilities

In order to implement the proposed Regional Strategy which calls for desalter and brine disposal commitments to meet San Timoteo Management Zone maximum benefit TDS objectives, staff recommends that specific desalting/brine disposal requirements be included. As proposed, the YVWD desalting requirement (Commitment #3) is added to reflect the current status of their desalter construction and operation. Proposed desalting requirements are also included for the City of Beaumont (Commitment #4) to require specific that planning for desalter and brine disposal facilities begin as soon as possible after the Basin Plan is amended.

The proposed addition of desalter/brine disposal requirements for the San Timoteo Management Zone Maximum Benefit Program is shown in the Attachment to Resolution No. R8-2014-0005, Chapter 5, Implementation, Section VI.B.2. San Timoteo Maximum Benefit Program requirements.

Commitment #5 – Non-potable water supply

Staff proposes to add non-potable water supply requirements to be consistent with the approach taken in the Yucaipa and Beaumont Management Zones. The TDS requirements for non-potable water supplies for the San Timoteo Management Zone would require the TDS of recycled water used in the non-potable system to meet the San Timoteo Management Zone TDS water quality objective as a 10-year running averages.. Meeting the San Timoteo Management Zone objective can be accomplished via blending, desalting or a combination of both.

The proposed non-potable water supply requirement for the San Timoteo Management Zone Maximum Benefit Program is shown in the Attachment to Resolution No. R8-2014-0005, Chapter 5, Implementation, Section VI.B.2. San Timoteo Maximum Benefit Program requirements.

Commitment #6 – Ambient Water Quality Determination

Staff propose to identify the specific requirement for YVWD and the City of Beaumont to contribute to the stakeholder-led effort to determine ambient TDS and nitrate quality in the San Timoteo Management Zone every three years. As reflected in Sections 8.3 and 8.4, both agencies have been contributing to this effort this since the requirement for ambient quality determination was added to the Basin Plan in 2004 as part of the maximum benefit programs for the Yucaipa/San Timoteo and Beaumont/San Timoteo Management Zones maximum benefit programs. Therefore, this requirement would not establish new

regulations but, rather, reflect the separate applicability to the San Timoteo Management Zone.

The proposed ambient management zone water quality determination requirement for the San Timoteo Management Zone Maximum Benefit Program is shown in the Attachment to Resolution No. R8-2014-0005, Chapter 5, Implementation, Section VI.B.2. San Timoteo Maximum Benefit Program requirements.

Commitment #7 – Improve Surface Water Discharge Quality to the San Timoteo Management Zone

YVWD and the City of Beaumont wastewater discharges to the unlined reach of San Timoteo Creek impact the quality of the San Timoteo Management Zone. In order to protect underlying management zone quality, staff propose that YVWD and the City of Beaumont prepare wastewater quality improvement plans respective to their facilities. The plans need to detail how these agencies intend to meet the underlying groundwater quality objectives.

The proposed wastewater quality improvement plan requirement for the San Timoteo Management Zone Maximum Benefit Program is shown in the Attachment to Resolution No. R8-2014-0005, Chapter 5, Implementation, Section VI.B.2. San Timoteo Maximum Benefit Program requirements.

9.0 Antidegradation Analysis

Pursuant to the State Board's antidegradation policy (Resolution No. 68-16), it is necessary to consider whether the proposed changes to the Basin Plan would result in a lowering of water quality and, if so, whether (i) beneficial uses would continue to be protected; (ii) waste discharges would receive best practicable treatment or control; and, (iii) water quality consistent with maximum benefit to the people of the state would be maintained.

There would be no lowering of water quality as the result of the proposed amendment. Update of the Maximum Benefit Programs in the San Timoteo watershed, descriptive update of the Beaumont Management Zone boundary, incorporation of the Recycled Water Policy and the On-site Wastewater Treatment System Policy and update of the groundwater management zone ambient water quality all ensure continued protection of water quality. Further, there would also be no change to the Regional Water Board's regulatory programs to manage salt in the Santa Ana basin. Therefore, no further antidegradation analysis is required.

10.0 California Environmental Quality Act

The Secretary of Resources has certified the Basin Planning process as functionally equivalent to the preparation of an Environmental Impact Report (EIR) or a Negative Declaration pursuant to the California Environmental Quality Act (CEQA). However, in lieu of these documents an environmental analysis is to be presented in a substitute document that includes, at a minimum, a description of the proposed activities and either: 1) alternatives to the activities and mitigation measures to avoid or reduce any significant or potentially significant effects that the proposed project may have on the environment; or, 2) a statement that the proposed project would not have any significant or potentially significant effects on the environment, supported by a checklist or other documentation (California Code of Regulations, Title 14, Chapter 3, Section 15000 *et seq.* (CEQA Guidelines), Section 15252).

This staff report describes the proposed Basin Plan amendments (i.e., the proposed project). The proposed amendments entail the following modifications: update of the Beaumont Management Zone boundary description; update of the provisions regarding groundwater management zone ambient TDS and nitrate-nitrogen water quality and assimilative capacity; update of the reclamation discussion; incorporation of revised maximum benefit programs for the Yucaipa, San Timoteo and Beaumont groundwater management zones; deletion of the TDS and nitrogen wasteload allocations for the Yucaipa Valley Water District and the City of Beaumont; and, inclusion of a nitrogen loss coefficient for the San Jacinto Basin. Updating the Beaumont Management Zone boundary description and updating Basin Plan narrative regarding reclamation have no environmental consequences. Updating findings of ambient quality and assimilative capacity may affect the effluent limitations that must be specified for waste discharges. These effluent limitations may require additional actions by responsible dischargers to achieve compliance. Any such actions would be subject to project-specific environmental review. Similarly, modifications of the maximum benefit program commitments will likely entail the implementation of new/revised projects by the responsible parties. The changes to the maximum benefit programs recommended herein are based on the Regional Strategy already identified and approved by the responsible agencies. Implementation of the projects envisioned by this Strategy will require project-specific environmental review. Deletion of the wasteload allocations would not result directly in impacts on the environment. Compliance with alternative limitations based on the maximum benefit objectives and commitments may

necessitate additional projects by the responsible parties. Once again, such projects would be subject to project-specific environmental review. CEQA analysis of the potential impacts of establishing nitrogen loss coefficients applicable to discharges was conducted as part of the 2004 Basin Plan amendment process and, more specific to the San Jacinto basin, as part of the renewal of the waste discharge requirements for the Eastern Municipal Water District. The proposed Basin Plan amendment includes the incorporation of the statewide Onsite Wastewater Treatment System Policy and relevant, requisite changes to the Basin Plan minimum lot size criteria for onsite disposal system use. CEQA analysis was conducted by the State Water Resources Control Board as part of the adoption of this statewide Policy; therefore, no further analysis needs to be conducted.

The draft Environmental Checklist (Attachment B to this report) concludes that there would be no potentially significant impacts on the environment caused by adoption of this Basin Plan amendment. Therefore, no mitigation measures are required. While an alternatives analysis is also not required, it should be noted that the amendments are the result of extensive evaluation by the Regional Board and watershed stakeholders to identify suitable alternative strategies to protect water quality, optimize the use of water resources, including recycled water, and to assure the long-term reliability and availability of water supplies.

11.0 Scientific Peer Review

Pursuant to Health and Safety Code Section 57004, all proposed rules that have a scientific basis or components must be submitted for external scientific peer review.

The procedures and methods that support the update of the Beaumont Management Zone boundary description, update of the groundwater management zone ambient TDS and nitrate-nitrogen water quality, update of reclamation discussion, update of the maximum benefit programs for the San Timoteo watershed, deletion of the wasteload allocations for YVWD and the City of Beaumont and incorporation of the nitrogen loss coefficient for the San Jacinto basin were scientifically reviewed as part of the 2004 Basin Plan amendment. In addition, peer review was conducted by the State Water Resources Control Board as part of the adoption of the statewide Onsite Wastewater Treatment System Policy.

Based upon these findings, staff has determined that no further scientific peer review need be conducted.

12.0 Staff Recommendation

Board staff recommends the adoption of Resolution No. R8-2014-0005, adopting the amendment to the Basin Plan shown in the attachment to the Resolution to amend Chapters 2 (Plans and Policies), Chapter 3 (Beneficial Uses) and Chapter 5 (Implementation Plan – Salt Management Plan).

Attachments:

Attachment A	Tentative Resolution No. R8-2014-0005, including the proposed Basin Plan Amendment
Attachment B	Environmental Checklist

13.0 References

Asociacion de Gente Unida por el Agua v. Central Valley Regional Quality Control Board. No. C066410 (2012 DJDAR 15291) (3rd Dist.) (November 6, 2012)

California Regional Water Quality Control Board, Santa Ana Region. (2004). Resolution No. R8-2004-0001. Resolution Amending the Water Quality Control Plan for the Santa Ana River Basin to Incorporate an Updated Total Dissolved Solids (TDS) and Nitrogen Management Plan for the Santa Ana Region.

California Regional Water Quality Control Board, Santa Ana Region. (2008). Order No. R8-2008-0008, Issuance of Waste Discharge and Producer/User Reclamation Requirements for Eastern Municipal Water District, Riverside County

California Regional Water Quality Control Board, Santa Ana Region. (2009). Order No. R8-2009-0002. Amendment of Order No. R8-2006-0003, NPDES No. CA0105376, Waste Discharge and Producer/User Water Recycling Requirements for the City of Beaumont, Wastewater Treatment Plant No.1, Riverside County

California Regional Water Quality Control Board, Santa Ana Region. (2009). Resolution No. R8-2009-0034. Resolution Approving the Workplan Submitted by Yucaipa Valley Water District to determine the Ambient TDS and Nitrogen Groundwater Quality in the San Timoteo Management Zone.

California Regional Water Quality Control Board, Santa Ana Region. (2009). Resolution No. R8-2009-0035. Resolution Approving the Workplan Submitted by the City of Beaumont/San Timoteo Watershed Management Agency to determine the Ambient TDS and Nitrogen Groundwater Quality in the San Timoteo Management Zone.

California Regional Water Quality Control Board, Santa Ana Region. (2010). Resolution No. R8-2010-0012. Declaration of Conformance with Recycled Water Policy.

California Regional Water Quality Control Board, Santa Ana Region. (2010), Revised Schedule for San Timoteo Groundwater Management Zone Monitoring Well Installation and Preliminary Assessment of Assimilative Capacity, (Letter to the Yucaipa Valley Water District, July 27, 2010)

California Regional Water Quality Control Board, Santa Ana Region. (2010), Revised Schedule for San Timoteo Groundwater Management Zone Monitoring Well Installation and Preliminary Assessment of Assimilative Capacity, (Letter to the City of Beaumont, July 27, 2010)

California Regional Water Quality Control Board, Santa Ana Region. (2010), Order Pursuant to Water Code Section 13267 for Technical Reports for a Technical Report to Support the Implementation of the Maximum Benefit Objectives for Total Dissolved Solids and Nitrate Nitrogen in the Beaumont Management Zone, September 13, 2010

California Regional Water Quality Control Board, Santa Ana Region. (2011), Approval of a Time Extension for the Submittal of a Salt Offset Plan Based on the Preliminary Assessment of

Total Dissolved Solids and Nitrogen Assimilative Capacity in the San Timoteo Management Zone, (Letter to the Yucaipa Valley Water District, February 2, 2011)

California Regional Water Quality Control Board, Santa Ana Region. (2011), Disapproval of the Proposed Salt Offset Plan for the City of Beaumont's Discharges to the San Timoteo Management Zone, (Letter to the City of Beaumont, February 2, 2011)

California Regional Water Quality Control Board, Santa Ana Region. (2012), Comments on the Proposals to Implement Maximum Benefit Commitments for the Beaumont Groundwater Management Zone, (Letter to Yucaipa Valley Water District, Beaumont Cherry Valley Water District, City of Banning, San Gorgonio Pass Agency, City of Beaumont, January 23, 2012)

California State Water Resources Control Board, (1968). Resolution No. 68-16. Policy with Respect to Maintaining High Quality Waters.

California State Water Resources Control Board, (1973). Order 73-4, In the Matter of the Petition of Orange County Water District for Review of Order No. 72-16 of the California Regional Water Quality Control Board, Santa Ana Region, Prescribing Waste Discharge Requirements for Rancho Caballero Mobilehome Park.

California State Water Resources Control Board, (1990). Antidegradation Policy Implementation for NPDES Permitting, Administrative Procedures Update.

California State Water Resources Control Board, (2012). Resolution No. 2012-0032. Water Quality Control Policy for Siting, Design, Operation and Maintenance of Onsite Wastewater Treatment Systems.

California State Water Resources Control Board, (2013). Resolution No. 2013-0003. Recycled Water Policy.

City of Banning, Beaumont Cherry Valley Water District, San Gorgonio Pass Water Agency, Yucaipa Valley Water District, (2011), Proposed Regional Implementation of Maximum Benefit Commitments for the Beaumont Management Zone. Preliminary Draft

City of Beaumont, (2011) – City of Beaumont Comments on the Proposal to Extend the Maximum Benefit Commitments in the Beaumont Management Zone, (Letter to Kurt Berchtold, November 23, 2011)

Daniel B. Stephens & Associates. (2007), Quantification of Nitrogen Removal Under Recycled Water Ponds, Prepared for Eastern Municipal Water District.

Wildermuth Environmental, Inc. (2000). TIN/TDS Phase 2A: Tasks 1 through 5, TIN/TDS Study of the Santa Ana Watershed, Technical Memorandum.

Wildermuth Environmental, Inc. (2005). Recomputation of Ambient Water Quality in the Santa Ana Watershed for the Period of 1984 to 2003, Final Technical Memorandum.

Wildermuth Environmental, Inc. (2008a). Recomputation of Ambient Water Quality in the Santa Ana Watershed for the Period of 1987 to 2006, Final Technical Memorandum.

Wildermuth Environmental, Inc. (2008b). San Timoteo Management Zone, Monitoring Network Development Plan. Prepared for the San Timoteo Watershed Management Authority, City of Beaumont and Yucaipa Valley Water District.

Wildermuth Environmental, Inc. (2010). Preliminary Assessment of Assimilative Capacity for TDS and Nitrogen in the San Timoteo Management Zone

Wildermuth Environmental, Inc. (2011). Recomputation of Ambient Water Quality in the Santa Ana Watershed for the Period of 1990 to 2009, Final Technical Memorandum.